Report

A Study to Determine DBE Availability and Analyze Disparity in the Transportation Contracting industry in Oklahoma

Oklahoma Department of Transportation



Report

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Prepared for

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SECTION ES. Executive Summary

The Oklahoma Department of Transportation (ODOT) encourages utilization of minority- and women-owned firms in its contracts when implementing the Federal Disadvantaged Business Enterprise (DBE) Program. Although agencies such as ODOT are required by the U.S. Department of Transportation (USDOT) to implement the Program in order to receive USDOT funds, state DOTs must tailor implementation of the Program to their unique markets.

ODOT engaged a team led by BBC Research & Consulting (BBC) to prepare a disparity study focusing on ODOT's transportation construction and engineering contracts. The disparity study will assist ODOT in making decisions concerning future implementation of the Federal DBE Program.

Groups throughout the country have made legal challenges to how state DOTs and other agencies have implemented the Federal DBE Program. The disparity study provides ODOT with additional information to ensure that it is meeting legal standards for Program implementation. It is an independent, objective assessment of ODOT's past utilization of minority- and women-owned firms.

There are steps ODOT could take to open more contracting opportunities to small businesses and minority- and women-owned firms (MBE/WBEs). The disparity study examines these topics in considerable detail. This Executive Summary briefly answers the following questions:

- 1. Who performed the disparity study?
- 2. What is the Federal DBE Program?
- 3. Why did ODOT undertake the disparity study?
- 4. What does a disparity study include?
- 5. What proportion of firms available for ODOT contracts are MBEs and WBEs?
- 6. What share of ODOT contract dollars might be expected to go to MBEs and WBEs?
- 7. What share of ODOT contract dollars did go to MBEs and WBEs?
- 8. Was there a disparity between the utilization and availability of MBEs and WBEs on ODOT contracts?

- 9. What are conditions for minorities and women within the Oklahoma marketplace?
- 10. How can ODOT use study results when setting an annual goal for DBE participation?
- 11. How can ODOT use study results to project the portion of its annual DBE goal to be met through neutral means?
- 12. Can ODOT continue to use race- and gender-conscious measures such as DBE contract goals?
- 13. Which racial/ethnic/gender groups of DBEs might be considered eligible for any future race- and gender-conscious program elements?
- 14. What are ODOT's next steps?

1. Who performed the disparity study?

BBC is a Denver-based economic research firm that is one of the leading disparity study consultants in the United States, having conducted disparity studies for more than 70 government agencies since 1989. The disparity study team included:

- BBC Research & Consulting (BBC) prime consultant, a Denver-based research firm. BBC had overall responsibility for the study and performed most of the quantitative analyses.
- Holland + Knight LLP (H+K), a national law firm. H+K conducted the legal analysis that provided the basis for the study and also performed in-depth personal interviews of business owners and trade associations.
- Technology and Management Solutions (TMS), an Oklahoma-based minority woman-owned firm specializing in operations and information technology. TMS assisted in contract data collection and analysis. TMS also conducted in-depth interviews with local businesses.
- M&M Business Consultants (M&M), a minority woman-owned firm in Oklahoma that provides training and other services for MBE/WBEs. M&M staff conducted in-depth interviews with Oklahoma business owners and trade associations.
- Customer Research International (CRI), a minority-owned telephone survey firm in San Marcos, Texas. Under BBC's direction, CRI conducted telephone interviews with construction and engineering companies across Oklahoma.

Section I of the report provides more information about the study team.

2. What is the Federal DBE Program?

The federal government requires state and local governments to implement the Federal DBE Program if they receive U.S. Department of Transportation (USDOT) funds for transportation projects.¹

- ODOT has been implementing some version of a Federal DBE Program since the 1980s.
- The Federal DBE Program is intended to ensure nondiscrimination in the award and administration of USDOT-assisted contracts, including contracts funded in part through the Federal Highway Administration (FHWA). The Program is intended to remedy past and current discrimination against disadvantaged business enterprises, and ensure a "level playing field" in which those firms can compete fairly for USDOT-funded contracts.²

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¹ 49 CFR Section 26.21.

http://www.dotcr.ost.dot.gov/asp/dbe.asp.

Federal regulations (49 CFR Part 26) guide how state and local governments implement the Federal DBE Program.³

- In Oklahoma, ODOT is responsible for certifying firms as DBEs according the regulations in the Federal DBE Program. Firms can only be certified as DBEs if they meet criteria for social and economic disadvantage. In the Federal DBE Program, minority- and women-owned firms are presumed to be socially disadvantaged. Certification criteria for economic disadvantage include business revenue and personal net worth of the business owner.
- State and local agencies, including ODOT, develop overall annual goals for utilization of DBEs in their USDOT-funded contracts. An agency expresses its annual DBE goal as a percentage of its contract dollars that might be expected to go to DBEs absent any effects of discrimination.
- If necessary, the Federal DBE Program allows state and local agencies to apply DBE goals to specific contracts, which ODOT has done for certain of its FHWA-funded contracts. ODOT does not set DBE contract goals on contracts that do not include FHWA funds (the study refers to these non-federally-funded contracts as "state-funded contracts").
- When awarding FHWA-funded contracts, ODOT considers whether or not a bidder meets the DBE contract goal (by including DBEs as subcontractors in the project) or shows good faith efforts to do so.
- The Federal DBE Program lists minority groups (as well as women) presumed to be socially disadvantaged and eligible to participate in measures such as DBE contract goals. However, some state and local agencies limit participation in race- and gender-conscious elements of the Program to certain racial, ethnic or gender groups. For example, some state departments of transportation have received a waiver from USDOT that allows them to set contract goals for "Underutilized DBEs" (UDBEs), rather than all DBE groups.

3. Why did ODOT undertake the disparity study?

Study results will help ODOT make decisions concerning its implementation of the Federal DBE Program. Future ODOT decisions include:

- Its overall annual goal for DBE participation in FHWA-funded contracts;
- Specific program elements, including measures to increase the participation of all small businesses; and
- Whether all DBE groups would be eligible to participate in any race- and genderconscious measures such as DBE contract goals, or whether eligibility would be limited to UDBEs.

³ http://www.fhwa.dot.gov/HEP/49cfr26.htm.

Throughout the country, a number of non-minority contractors and other groups have filed lawsuits challenging the constitutionality of the Federal DBE Program, or the constitutionality of state and local governments' implementation of the Program. Information provided in the disparity study will help ODOT ensure that its implementation of the Federal DBE Program is in compliance with guidance from USDOT and the courts, including U.S. Supreme Court decisions. Legal issues are explained in Section I and Appendix A of this report.

4. What does a disparity study include?

Disparity studies typically include analyses of whether there is a *disparity* between the utilization and availability of minority-owned firms (MBEs) and white women-owned firms (WBEs).

- "Utilization" refers to the percentage of an agency's contract dollars that went to MBEs and WBEs over a number of years.
- "Availability" refers to the percentage of contract dollars that one might expect to go to MBEs and WBEs given the number of MBEs and WBEs (relative to all firms) available for specific types and sizes of agency prime contracts and subcontracts.

BBC included both certified and non-certified MBEs and WBEs in the utilization and availability results so that the disparity analysis would identify any potential barriers related to race, ethnicity or gender of the business owner (rather than size of business). For purposes of this study, "minority" follows the definitions from the Federal DBE Program: African Americans, Asian-Pacific Americans, Subcontinent Asian Americans, Hispanic Americans and Native Americans. To further isolate the possible effects of gender, "WBEs" refers to white women-owned firms in this disparity study. Firms owned by minority women are included in the utilization and availability results for minority-owned firms (see Section IV of this report for more detail about why BBC classifies WBEs in this way).

- To perform the utilization analysis, the BBC study team examined about 8,000 ODOT prime contracts and subcontracts related to FHWA- and state-funded transportation contracts from July 2004 through June 2009, totaling \$3.3 billion. The study team examined location, types of work involved, size of the contract or subcontract, year of the contract and whether DBE contract goals applied.
- In the availability analysis, the study team successfully contacted more than 2,100 Oklahoma firms doing business in relevant subindustries to discuss whether they were qualified and interested in ODOT work, the types of work they conduct, sizes of contracts they perform and other firm characteristics.
 - ➤ Not all firms reported qualifications and interest in ODOT work.
 - ➤ A business that did express qualifications and interest in ODOT work was typically only available for certain types, sizes and locations of ODOT prime contracts and subcontracts.

⁴ City of Richmond v. J.A. Croson, 488 U.S. 469 (1989) and Adarand Constructors, Inc. v. Pena, 515 U.S. 200 (1995).

⁵ If the disparity analysis were conducted based only on certified DBEs, it would exclude the most successful MBEs and WBEs from analysis, which could skew results.

- BBC determined overall availability by examining the number of MBEs and WBEs available for each prime contract and subcontract in proportion to the total number of firms available for that prime contract or subcontract.⁶
 - Contract-by-contract availability results were then aggregated on a dollar-weighted basis to determine the overall percentage of ODOT contract dollars that might be expected to go to MBEs and WBEs.
- BBC compared actual utilization of MBEs and WBEs on ODOT contracts with the
 utilization that might be expected based on their availability for those types, sizes and
 locations of prime contracts and subcontracts.

The BBC study team also analyzed ODOT contracting processes, local marketplace conditions and business assistance programs. As part of those analyses, the study team developed statistical models using U.S. Census data and other information on the local marketplace; compiled and analyzed many hundreds of bids and proposals on ODOT contracts; completed telephone interviews with more than 1,000 local businesses; and conducted in-depth personal interviews with 59 business owners, trade associations and other individuals knowledgeable about local marketplace conditions.

What proportion of firms available for ODOT contracts are MBEs and WBEs?

Of the firms successfully interviewed in the availability analysis that reported qualifications, interest and other characteristics indicating that they were available for certain ODOT construction and engineering contracts:

- 16.6 percent were MBEs; and
- 11.6 percent were WBEs.
- In total, more than one in four firms available for ODOT construction and engineering prime contracts or subcontracts were an MBE or WBE.

These results are based on research with firms in the Oklahoma marketplace available for ODOT construction and engineering contracts. BBC primarily determined race/ethnicity/gender ownership of firms through telephone interviews with business owners and managers and other sources.

The availability interviews with local firms focused on Oklahoma businesses performing the types of work most pertinent to prime contracts and subcontracts involved in ODOT construction and engineering contracts. More than 2,100 firms were successfully contacted in the availability analysis.

Section IV and Appendix C of this report discuss the availability analysis in detail.

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⁶ For example, if BBC examined a \$50,000 fencing subcontract in 2009, only firms indicating that they were qualified and interested in ODOT work as a subcontractor, had performed or bid on similar work in the past in Oklahoma, had bid on or performed work of that size, and were in business in 2009 were counted as available for that work. (All of this information was collected from each firm by telephone in the availability interviews.) If 50 firms in the BBC availability database met those criteria, and 5 were minority-owned, MBE availability for that subcontract would be 10 percent. These results were weighted by the size of subcontract and combined with all of the other results for each ODOT prime contract and subcontract to determine overall availability.

6. What share of ODOT contract dollars might be expected to go to MBEs and WBEs?

Based on the information collected in availability interviews with local firms, and a review of about 8,000 construction prime contracts and subcontracts, the percentage of ODOT construction and engineering contract dollars expected to go to MBEs and WBEs is:

- 6.0 percent for MBEs; and
- 7.1 percent for WBEs.

These dollar-weighted availability figures are lower than what is indicated from a simple "headcount" of minority-, women- and majority-owned firms because relatively few of the firms available for ODOT's largest construction prime contracts are MBEs or WBEs.

BBC developed availability estimates for specific groups of MBEs, and for specific subsets of FHWAand state-funded prime contracts and subcontracts. These values serve as benchmarks to evaluate the actual percentage of ODOT contract dollars going to MBEs and WBEs.

Section IV provides more information about the availability analysis. Appendix B discusses study team collection of ODOT contract data.

7. What share of ODOT contract dollars did go to MBEs and WBEs?

Of the \$3.3 billion in ODOT construction and engineering contract dollars from July 2004 through June 2009 study period, \$217 million (6.6%) went to MBEs and \$401 million (12.1%) went to WBEs. ODOT's overall utilization of MBE/WBEs was 18.7 percent.

Native American-owned firms comprised most of the participation of MBEs in ODOT contracts. MBEs other than Native American-owned firms received about 1 percent of ODOT contract dollars during the study period (see Section V for detailed results by group).

MBE/WBE participation differed considerably between ODOT construction and ODOT engineering contracts:

- MBE/WBEs received 19.5 percent of ODOT construction contract dollars (see Figure ES-1).
- MBE/WBE participation in ODOT engineering contracts was much lower 4.2 percent (see Figure ES-2).

ODOT applied DBE contract goals to many of its FHWA-funded construction contracts, but not to its FHWA-funded engineering contracts during the study period. ODOT did not apply DBE contract goals to its state-funded contracts during the study period. There was little difference in MBE/WBE participation between ODOT's FHWA-funded and state-funded contracts, as shown in Figures ES-1 and ES-2.

Figure ES-1 also indicates that firms certified as DBEs represented 8.3 percentage points of the overall MBE/WBE participation on FHWA-funded construction contracts and 3.7 percentage points of overall MBE/WBE utilization on state-funded construction contracts. The balance went to firms owned by minorities and women that were not DBE certified. Even with the DBE contract goals program, more of the overall utilization of MBE/WBEs was non-DBE-certified firms than businesses certified as DBEs.

Figure ES-1.
MBE/WBE and DBE share of prime contract/subcontract dollars for ODOT construction contracts
July 2004–June 2009, FHWA vs. state funding

Note:

Certified DBE utilization.

Number of contracts/subcontracts analyzed is 5,741 for FHWA-funded contracts, 1,552 for state-funded contracts and 7,293 for all contracts.

For more detail and results by group, see Figures K-6, K-7 and K-5 in Appendix K.

Source:

BBC Research & Consulting from data on ODOT contracts.

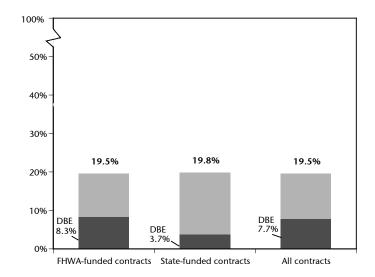


Figure ES-2 shows that firms certified as DBEs accounted for 1.7 percentage points of the 4.2 percent overall utilization of minority- and women-owned firms on engineering contracts; MBE/WBEs not certified as DBEs received the balance.

Figure ES-2.
MBE/WBE and DBE share of prime contract/subcontract dollars for ODOT engineering and related professional services contracts
July 2004–June 2009, FHWA vs. state funding

Note:

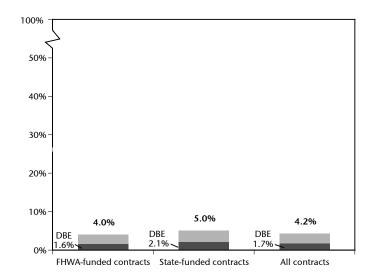
Certified DBE utilization.

Number of contracts/subcontracts analyzed is 565 for FHWA-funded contracts, 133 for state-funded contracts and 698 for all contracts.

For more detail and results by group, see Figures K-9, K-10 and K-8 in Appendix K.

Source:

BBC Research & Consulting from data on ODOT contracts.



8. Was there a disparity between utilization and availability of MBEs and WBEs on ODOT contracts?

BBC compared ODOT's actual utilization of minority- and women-owned firms with the share of contract dollars that those firms might be expected to receive based on their availability for specific ODOT prime contracts and subcontracts.

Overall, ODOT's utilization of minority- and women-owned firms exceeded what would be expected based on the availability of MBE/WBEs for that work. Results differ, however, between ODOT construction and engineering contracts. For construction contracts, disparity results differ by MBE/WBE group.

Disparity results for construction contracts. Utilization of Native American- and white womenowned firms on ODOT construction contracts exceeded what those firms would be expected to receive based on availability, even without DBE contract goals. However, there were substantial disparities in the utilization of certain other MBE groups.⁷

- There were substantial disparities for African American-, Asian Pacific American- and Hispanic American-owned firms on state-funded ODOT construction contracts.
- For FHWA-funded contracts, to which DBE contract goals applied, there were substantial disparities for African American- and Asian-Pacific American-owned firms.
- Because availability of Subcontinent Asian American-owned firms for construction contracts is small, it was difficult to assess the low utilization observed for that group.

Disparity results for engineering contracts. The 4.2 percent utilization of MBE/WBEs on ODOT engineering contracts was substantially less than what those firms would be expected to receive based on availability (19.2%).

- The observed disparity was statistically significant.
- MBE/WBE utilization was substantially below availability for FHWA-funded, statefunded and combined engineering contracts.
- BBC observed substantial disparities for all DBE groups African American-, Asian-Pacific American-, Subcontinent Asian American-, Hispanic American-, Native American- and white women-owned firms.
- BBC identified disparities for prime consultants and subconsultants.
- There is quantitative and qualitative evidence that MBE/WBE consultants pursuing ODOT prime contracts do not have the same success as majority-owned firms.

Until recently, ODOT did not implement any race-conscious measures such as DBE contract goals for FHWA-funded engineering-related contracts. Although not part of the study period, BBC analyzed engineering-related contracts that ODOT awarded in late 2009 and 2010, many of which did include DBE contract goals. Data from those contracts indicated that the use of DBE goals has led to greater MBE/WBE utilization.

Report sections V, VI and VII as well as Appendix K provide detailed results of the utilization and disparity analyses for different sets of ODOT contracts.

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⁷ A number of courts have ruled that a "substantial" disparity is one where utilization is less than 80 percent of what might be expected based on the availability analysis.

9. What are conditions for minorities and women within the Oklahoma marketplace?

BBC analyzed information collected through telephone interviews with Oklahoma businesses, in-depth interviews with local businesses and other data concerning marketplace conditions in Oklahoma. (Most of ODOT's contract dollars go to firms within Oklahoma.) The study identified:

- Within the local engineering industry, disparities related to opportunities for entry and advancement, business ownership and business success for minorities and women.
- For the local construction industry, disparities related to employment and business opportunities for African Americans, Hispanic Americans and Asian Americans.

Section II of the report identifies the relevant geographic market area for the disparity study. Section III summarizes quantitative and qualitative information about the Oklahoma marketplace. Appendices D through I provide detailed analyses.

10. How can ODOT use study results when setting an annual goal for DBE participation?

The Federal DBE Program outlines how agencies are to set overall annual goals for DBE participation in their USDOT-funded contracts (49 CFR Section 26.45). Steps include establishing a "base figure" after considering firms available for an agency's USDOT-funded work, and then considering a "step 2 adjustment." The BBC disparity study considered both the base figure and possible step 2 adjustment for a future ODOT overall annual goal.

Base figure. BBC's availability analysis determined that 12.7 percent of ODOT FHWA-funded contract dollars might be expected to go to minority- and women-owned firms based upon the availability of those firms for ODOT work. However, this figure refers to the availability of all minority- and women-owned firms, not just firms that appear to meet the federal guidelines for DBE certification.

- After accounting for minority- and women-owned firms that might be too large to meet federal DBE certification requirements, the availability analysis indicated a "base figure" of 9.3 percent.
- ODOT should consider 9.3 percent as the base figure for its overall annual DBE goal, but adjust it if the types of work anticipated in the future differ from the study period.
- Since 2005, ODOT's annual DBE goals have been between 8 and 9 percent.

Consideration of a step 2 adjustment. Per federal regulations, ODOT must consider possible adjustments to its overall annual DBE goal through a "step 2" process. BBC's analysis suggests that ODOT consider the following options.

- Option 1 making an upward adjustment. There are reasons that ODOT might consider a higher overall annual DBE goal than the 9.3 percent base figure.
 - ➤ BBC identified disparities in business ownership rates for certain MBE/WBE groups. If ODOT were to make an upward step 2 adjustment to its annual DBE goal, it might consider a figure of 12.9 percent, which reflects adjustments for disparities in business ownership rates for minorities and women.
 - ➤ Analyses of access to capital and other marketplace information also support an upward step 2 adjustment.
- Option 2 making no step 2 adjustment. When evaluating a step 2 adjustment, agencies are required to consider past DBE participation, which may represent a minimum demonstration of "current capacity of DBEs to perform work." Overall participation of certified DBEs on ODOT's FHWA-funded contracts for July 2004 through June 2009 was about 8 percent. That information might lead ODOT to not make an upward step 2 adjustment and instead adopt the 9.3 percent base figure as its overall annual goal for DBE participation.

ODOT is not required to make a step 2 adjustment, but would need to explain to FHWA why no adjustment is warranted if it chooses this option. Section VIII presents these analyses.

11. How can ODOT use study results to project the portion of its annual DBE goal to be met through neutral means?

The Federal DBE Program requires agencies to determine whether the overall annual DBE goal can be met solely through race-neutral measures, or whether race-conscious measures — such as DBE contract goals — are also needed. If any race- and gender-conscious measures are needed, the agency must project the portion of the overall annual DBE goal to be met through neutral and race- and gender-conscious means. Based on 49 CFR Part 26 and related USDOT guidance, transportation agencies should consider factors including:

- Past experience of the agency in meeting its overall annual DBE goal;
- Participation when the agency did not apply DBE contract goals (or other race- and gender-conscious measures); and
- The extent and effectiveness of race- and gender-neutral means that the agency could have in place for the next fiscal year.

⁹ 49 CFR Section 26.45 (d)(1)(i).

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⁸ 49 CFR Section 26.45 (d).

¹⁰ ODOT's assessment of median DBE participation indicated 8.9 percent utilization during a similar time period.

Past experience in meeting overall DBE goal. ODOT's annual DBE goals for federal fiscal years 2005 through 2009 ranged from 8.1 to 8.8 percent. Only firms certified as DBEs at the time of the contract can be counted toward meeting the annual DBE goal. Based on ODOT's reports and BBC's independent measurement of DBE utilization, it does not appear that ODOT fell substantially short of its past overall annual DBE goals, nor does it appear that it exceeded them.

Participation when no DBE contract goals applied. The disparity results described previously in this Executive Summary are pertinent when examining participation when no DBE contract goals are applied.

- Participation of MBE/WBEs on ODOT engineering contracts was about one-quarter of what would be expected based on the availability of MBE/WBEs for those contracts.
- Utilization of African American-, Asian-Pacific American- and Hispanic Americanowned firms on state-funded construction contracts was very low compared with availability. In a race-neutral environment, there was close to 0 percent participation of firms owned by those groups, well below what would be expected base on availability.

Section IX of the disparity study report presents a framework that ODOT might use when projecting the portion of the annual DBE goal that can be achieved through neutral means.

Race-neutral means that ODOT could have in place. Race- and gender-neutral measures are initiatives that open opportunities, remove barriers and otherwise assist businesses regardless of the race/ethnicity/gender of their ownership. ODOT currently implements a broad range of neutral measures. Many other organizations also implement small business development programs in Oklahoma.

BBC reviewed additional neutral measures that ODOT might consider for future implementation, including:

- Small business goals, consultant evaluation points and other programs to encourage utilization of certified small businesses on ODOT contracts;
- Changes to contracting policies and practices that would assist small businesses; and
- Business assistance programs.

Some neutral measures might be implemented quickly with minimal resources. However, other measures may require considerable time for review and development as well as additional resources for their administration. ODOT should consider these factors when projecting the portion of its overall DBE goal that could be achieved through neutral means (see Section IX of the report).

12. Can ODOT continue to use race- and gender-conscious measures such as DBE contract goals?

If ODOT projects that a certain portion of its overall annual DBE goal is to be met through race- and gender-conscious measures, one of the appropriate measures under the Federal DBE Program is contract goals for its FHWA-funded contracts.

Certain stronger race-conscious measures identified in the Federal DBE Program are permissible under extreme circumstances, but they might not be appropriate for ODOT implementation at this time.

13. Which racial/ethnic/gender groups of DBEs might be considered eligible for any future race- and gender-conscious program elements?

If ODOT determines that it will continue DBE contract goals, it must decide whether all DBE groups or only certain DBE groups would be included in meeting any contract goals. The following information may be useful in making such a determination:

- All DBE groups were underutilized in ODOT's engineering contracts.
- Certain DBE groups were underutilized in construction contracts when no DBE contract goals applied — African American-, Asian-Pacific American- and Hispanic American-owned firms.

ODOT would need to request a waiver from USDOT if it were to implement a program where all DBEs were eligible to meet DBE contract goals for engineering contracts but only underutilized DBEs (UDBEs) were eligible to meet DBE contract goals for construction contracts.

Several departments of transportation for other states have obtained waivers from USDOT that allow them to implement DBE contract goals for which only UDBEs are eligible.

14. What are ODOT's next steps?

The disparity study is an independent analysis of information related to ODOT's implementation of the Federal DBE Program. ODOT should review report results and other relevant information when making decisions concerning its implementation of the Federal DBE Program. Section X of the report provides additional guidance concerning Program components.

One of ODOT's past challenges has been collecting comprehensive data regarding DBE/MBE/WBE utilization in its contracts. Going forward, ODOT will need to closely monitor whether it is successful in removing barriers to MBE/WBE participation in its contracts, especially for groups showing substantial underutilization from July 2004 through June 2009. Ongoing data collection and analysis should include MBE/WBE and DBE utilization for both FHWA- and state-funded contracts.

USDOT periodically revises components of the Federal DBE Program and issues guidance concerning implementation of the Program. In addition, new court decisions provide insights as to proper implementation of the Federal DBE Program. ODOT should closely follow such developments.

SECTION I. Introduction

The Oklahoma Department of Transportation (ODOT) and other state DOTs must implement the Federal Disadvantaged Business Enterprise (DBE) Program in order to receive funds from the U.S. Department of Transportation. The disparity study provides information to assist ODOT in making decisions concerning its implementation of the Federal DBE Program. Information in the report will aid ODOT when:

- Establishing its overall annual aspirational goal for DBE participation in ODOT contracts funded by the Federal Highway Administration (FHWA);
- Examining whether or not it can attain the annual DBE goal solely through race-neutral means or whether race- or gender-conscious measures such as DBE contract goals are appropriate under the federal regulations;
- Projecting the percentage of the overall annual DBE goal it will meet through raceneutral means;
- Choosing the specific program elements it will apply; and
- Identifying specific racial/ethnic/gender groups of DBEs that may be eligible for any race-, ethnic- and gender-conscious remedies such as DBE contract goals in implementing the federal regulations. 1

Although the Federal DBE Program also applies to contracts funded by the Federal Transit Administration (FTA) and Federal Aviation Administration (FAA), ODOT has relatively little funding from FTA and no FAA funding. Therefore, this study focuses on information to help ODOT implement the Federal DBE Program for its FHWA-funded contracts.

Information from the disparity study is also useful to ODOT as it seeks to ensure a non-discriminatory environment within its non-federally-funded contracting.

Section I of this report presents:

- a. Background on federal, state and local programs and why ODOT chose to initiate a disparity study;
- b. An introduction to the study team; and
- c. The scope of the study.

¹ "Race-conscious" means "race-, ethnic- and gender-conscious" in this report, unless otherwise noted. Similarly, "race-neutral" means "race- and gender-neutral" unless otherwise noted.

A. Background

The federal government requires state and local governments to implement the Federal DBE Program if they receive U.S. Department of Transportation (USDOT) funds for transportation projects.² ODOT has been implementing some version of a Federal DBE Program since the 1980s. After enactment of the Transportation Equity Act for the 21st Century (TEA-21) in 1998, the U.S. Department of Transportation established a new Federal DBE Program to be implemented by state and local agencies receiving USDOT funds.

Federal regulations (49 CFR Part 26) guide how state and local governments implement the Federal DBE Program.³ If necessary, under the federal regulations, the Program allows state and local agencies to use DBE contract goals, which ODOT has set on certain FHWA-funded contracts. When awarding FHWA-funded contracts, ODOT considers whether or not a bidder meets the DBE contract goal or shows good faith efforts to do so.

To further explain the context for this disparity study, it is useful to review:

- 1. Race-conscious and neutral elements of the Federal DBE Program;
- 2. Race -conscious elements of state and local programs;
- 3. Legal standards that race -conscious programs must meet; and
- 4. Some of the reasons for completing a disparity study.

1. Race -conscious and neutral elements of the Federal DBE Program. Setting DBE contract goals under certain circumstances is one potential element of the Federal DBE Program. Because DBE contract goals promote the utilization of firms based in part on their race or gender ownership, such programs must satisfy certain legal and regulatory standards in order to be valid, as discussed below.

Rules governing state and local government implementation of the Federal DBE Program also provide for government agencies to implement the Program without the use of race-conscious measures such as DBE contract goals, or with limited use of such measures. According to Program rules (49 CFR Section 26.51), a state or local agency must meet the maximum feasible portion of its overall goal for DBE participation through "race-neutral means." Race-neutral measures include removing barriers to participation of firms in general or promoting use of small or emerging businesses. If an agency can meet its overall annual goal solely through race-neutral means, it must not use race-conscious measures.

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² 49 CFR Part 26.21.

³ http://www.fhwa.dot.gov/HEP/49cfr26.htm.

Given this context, general approaches for a state or local government to implement the Federal DBE Program include:

a. Applying race-conscious measures such as DBE contract goals, as well as neutral measures, with all certified DBEs eligible for race- and gender-conscious elements. Many states use both race-conscious and race-neutral program measures when implementing the Federal DBE Program. Their race-conscious measures include the DBE contract goals feature of the Federal DBE Program.

ODOT currently implements the Federal DBE Program in this fashion. On FHWA-funded construction contracts, ODOT specifies a goal for DBE participation in the contract (contract goals are expressed as a percentage of the contract dollars that might go to DBEs). Prime contractors bidding on the contract must include DBEs in a number that would meet the goal or show good faith efforts to do so. ODOT began setting DBE contract goals for certain USDOT-funded engineering contracts in the last six months of 2009.

A number of non-minority contractors and other groups have filed lawsuits challenging the constitutionality of the Federal DBE Program, or the constitutionality of the state and local governments' implementation of the Program, or both. For example, contractors have filed lawsuits against state departments of transportation implementing the Federal DBE Program in Illinois, Minnesota, Nebraska and Washington. The Federal DBE Program and its implementation by a state were successfully defended in Illinois, Minnesota and Nebraska but not in Washington. (The legal standards applied in these and other cases are explained later in Section I and Appendix A of this report.)

- b. Applying more restrictive race-conscious measures only in extreme circumstances (as well as neutral programs). The Federal DBE Program provides that a recipient may not set-aside contracts for DBEs, except that, in limited and extreme circumstances, a recipient may use set-asides when no other method could be reasonably expected to redress egregious instances of discrimination. (49 CFR Part 26.43). Quotas for DBE participation are prohibited under the Program.
- c. Applying race-conscious measures, but limit application to a subset of DBEs. Some state DOTs limit participation in the race- and gender-conscious elements of the Program to certain racial, ethnic or gender groups. For example, the Colorado Department of Transportation received a waiver from USDOT that allowed CDOT to set contract goals for "Underutilized DBEs" (UDBEs), which might not necessarily include all DBE groups. CDOT has counted the participation of all DBEs toward CDOT's overall annual goal, but only UDBEs can be used to meet individual contract goals. Over a number of years, CDOT has tracked utilization of minority- and womenowned firms by group to identify the racial, ethnic and gender groups that are "underutilized" and therefore eligible to be UDBEs.

⁴ Because ODOT only began setting DBE contract goals for certain engineering and other professional services contracts since July 2009, none of the engineering-related contracts in the July 2004–June 2009 study period had DBE contract goals.

- d. Operate an entirely race-neutral program. Some state DOTs have operated the Federal DBE Program without DBE contract goals or other race-conscious measures. For example, the New Mexico Department of Transportation discontinued using DBE contract goals and began implementing the Federal DBE Program using solely raceneutral measures in the 1990s.
- **2.** Race- and gender-conscious measures of state and local programs. ODOT and other state DOTs have transportation contracts funded solely through state and local sources. The Federal DBE Program does not apply to these contracts.

Some state and local governments have programs with elements similar to DBE contract goals that they apply to their non-federally-funded contracts. For example, the Texas Department of Transportation operates a Historically Underutilized Business (HUB) Program that includes contract goals on certain state-funded projects.

ODOT does not apply any race-conscious programs to its non-federally-funded contracts. However, the State once had the Oklahoma Minority Business Enterprise Assistance Act, which gave favorable consideration to minority business enterprises (MBEs) submitting bids on state-funded contracts. Under this program, a bid from an MBE was considered to be the lowest if it was within 5 percent of the lowest bid from a non-minority firm. Non-minority contractors successfully challenged this program. In 2001, the U.S. District Court for the Western District of Oklahoma ruled that the State of Oklahoma had not met the legal standards for a constitutionally permissible race-conscious contracting program. Appendix A includes a discussion of this case — *Kornhass Construction, Inc. v. State of Oklahoma, Department of Central Services*, 140 F.Supp.2d 1232 (W.D. OK. 2001) — as well as other court decisions concerning state and local minority business programs.

- **3. Legal standards that race-conscious programs must meet.** The U.S. Supreme Court has established that government programs including race-conscious elements must meet the "strict scrutiny" standard of constitutional review. The two key U.S. Supreme Court cases in this area are:
- The 1989 decision in *City of Richmond v. J.A. Croson Company*, which established the strict scrutiny standard of review for race-conscious programs enacted by state and local governments; and
- The 2005 decision in *Adarand Constructors, Inc. v. Pena*, which established the same standard of review for federal race-conscious programs. 6

⁵ City of Richmond v. J.A. Croson, 488 U.S. 469 (1989).

⁶ Adarand Constructors, Inc. v. Pena, 515 U.S. 200 (1995).

The strict scrutiny standard is extremely difficult for a government entity to meet — it presents the highest threshold for evaluating the legality of race-conscious programs short of prohibiting them altogether. Under the strict scrutiny standard, a governmental entity must:

- Have a compelling governmental interest in remedying past identified discrimination; and
- Show that any program adopted is *narrowly tailored* to achieve the goal of remedying the identified discrimination. There are a number of factors a court considers when determining whether a program is narrowly tailored (see Appendix A).

A government agency must meet both components of the strict scrutiny standard; a program that fails either one is unconstitutional.

Examples of race-conscious programs that have been ruled as unconstitutional. As discussed in Appendix A, many state and local race-conscious programs have been challenged in court and found to be unconstitutional.

The Kornhass case in Oklahoma illustrates how a program failed to meet the strict scrutiny standard. In this case, the State of Oklahoma indicated that its compelling governmental interest was to "promote the economy of the State and to ensure that minority business enterprises are given an opportunity to compete for state contracts." Thus, the district court found the State admitted that the MBE Act's bid preference "is not based on past discrimination," but is rather based on a desire to "encourag[e] economic development of minority business enterprises which in turn will benefit the State of Oklahoma as a whole." The district court found that this articulated interest was not "compelling" in the absence of evidence of past or present racial discrimination. It found that the State's program failed the narrow tailoring test as well. (See Appendix A for a detailed discussion of this case.)

Examples of race-conscious programs that have satisfied the strict scrutiny standard. The Federal DBE Program, on its face, has been held to be constitutional in legal challenges to date (see discussion in Appendix A of Northern Contracting, Inc. v. Illinois DOT, Sherbrooke Turf, Inc. v. Minn DOT and Gross Seed v. Nebraska Department of Roads, and Western States Paving Co. v. Washington State DOT¹⁰, Adarand Constructors, Inc. v. Slater¹¹).

In the *Northern Contracting* decision (2007), the Seventh Circuit Court of Appeals cited its earlier precedent in *Milwaukee County Pavers v. Fielder* to hold "that a state is insulated from [a narrow tailoring] constitutional attack, absent a showing that the state exceeded its federal authority. IDOT

⁷ Kornhass Construction, Inc. v. State of Oklahoma, Department of Central Services, 140 F.Supp.2d 1232 (W.D. OK. 2001) at 1240.

⁸ 473 F.3d 715 (7th Cir. 2007).

⁹ 345 F.3d 964 (8th Cir. 2003), <u>cert. denied</u>, 541 U.S. 1041 (2004).

¹⁰ Western States Paving Co. v. Washington State DOT, 407 F.3d 983 (9th Cir. 2005), cert. denied, 546 U.S. 1170 (2006).

¹¹ Adarand Constructors, Inc. v. Slater, 228 F.3d 1147 (10th Cir. 2000) cert. granted then dismissed as improvidently granted sub nom. Adarand Constructors, Inc. v. Mineta, 532 U.S. 941, 534 U.S. 103 (2001).

[Illinois DOT] here is acting as an instrument of federal policy and Northern Contracting ... cannot collaterally attack the federal regulations through a challenge to IDOT's program." ¹²

The Seventh Circuit Court of Appeals distinguished both the Ninth Circuit Court of Appeals decision in *Western States Paving* and the Eighth Circuit Court of Appeals decision in *Sherbrooke Turf*, relating to an as-applied narrow tailoring analysis. The Seventh Circuit held that the IDOT's application of a federally mandated program is limited to the question of whether the state exceeded its grant of federal authority under the Federal DBE Program. The Seventh Circuit analyzed IDOT's compliance with the federal regulations regarding calculation of the availability of DBEs, adjustment of its goal based on local market conditions and its use of race-neutral methods set forth in the federal regulations. The court held that Northern Contracting failed to demonstrate that IDOT did not satisfy compliance with the federal regulations (49 C.F.R. Part 26). Accordingly, the Seventh Circuit Court of Appeals affirmed the district court's decision upholding the validity of IDOT's DBE program. (See the discussion of the *Northern Contracting* decision in Appendix A.)

However, in *Western States Paving*, the Ninth Circuit Court of Appeals found that the Washington State DOT failed to show its implementation of the Federal DBE Program to be narrowly tailored. Since that 2005 ruling, state DOTs in Ninth Circuit states operated entirely race-neutral programs until studies could be completed that would help show whether any race-conscious elements of the Federal DBE Program were appropriate in those states, and, if so, for which racial, ethnic and gender groups.¹⁶

Because Oklahoma is located within the jurisdiction of the Tenth Circuit Court of Appeals, neither the Seventh Circuit nor the Ninth Circuit ruling are controlling or binding on ODOT, yet they do indicate some differences in the analysis for legally defensible implementation of the Federal DBE Program. (See Appendix A of this report as well as USDOT Guidance¹⁷ for further discussion of the implications of these issues.)

In addition to the Federal DBE Program, some state and local government minority-business programs have been found to meet the strict scrutiny standard. Appendix A discusses the successful defense of state and local race-conscious programs, including *Concrete Works of Colorado v. City and*

¹² 473 F.3d at 722

¹³ <u>Id</u>. at 722.

¹⁴ <u>Id</u>. at 723-24.

¹⁵ Id.

¹⁶ Disparity studies have been completed or are underway for state DOTs in each state within the Ninth Circuit— Alaska, Hawaii, Washington, Idaho, Montana, Oregon, California, Nevada and Arizona — as well as many local transit agencies and airports in those states.

¹⁷ http://www.osdbu.dot.gov/DBEProgram/dbeqna.cfm.

County of Denver¹⁸ and H.B. Rowe Company v. Tippett, North Carolina Department of Transportation, et al. 19

- **4. Summary of reasons to complete a disparity study.** It is opportune for ODOT to develop more comprehensive information on which to base its implementation of the Federal DBE Program.
- The USDOT recommends that agencies implementing the Federal DBE Program conduct disparity studies;
- Some of the information most useful in setting overall annual DBE goals and fine-tuning implementation of the Program requires the types of research developed in a disparity study;
- When challenged in court, the states that have successfully defended their implementation of the Federal DBE Program relied on the types of information developed in a disparity study;
- Information developed in a disparity study provides insights to improve minority- and women-owned firms' access to non-federally-funded contracts; and
- An independent, objective review of minority- and women-owned business participation in a state's contracting is valuable to groups that may have concerns about that agency's practices. ODOT has come under scrutiny from minority business groups, the Oklahoma Legislative Black Caucus and others regarding its utilization of minority- and women-owned firms.

B. Study Team

ODOT commissioned BBC Research & Consulting to provide information to help it implement the Federal DBE Program.

The BBC disparity study team consists of:

- BBC Research & Consulting (BBC), a Denver-based economic and policy research firm (prime consultant). BBC has overall responsibility for this study and performed most of the required quantitative analyses.
- Holland + Knight LLP (H+K), a national law firm. H+K conducted the legal analysis that provides the basis for this study and also performed in-depth personal interviews of business owners and trade associations.

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¹⁸ Concrete Works of Colorado v. City and County of Denver, 321 F.3d 950 (10th Cir. 2003), cert. denied, 540 U.S. 1027 (2003).

¹⁹ H.B. Rowe Corp., Inc. v. W. Lyndo Tippett, North Carolina DOT, et al; 589 F. Supp. 2d 587 (E.D.N.C. 2008), appeal pending in the Fourth Circuit Court of Appeals.

- Technology and Management Solutions (TMS), an Oklahoma-based minority woman-owned firm specializing in operations and information technology. TMS assisted in analyzing ODOT contract databases and collecting contract, subcontract and bidding information. TMS also conducted some in-depth interviews with businesses in Oklahoma.
- M&M Business Consultants (M&M), a minority woman-owned firm in Oklahoma that provides training and other services for MBE/WBEs. M&M staff conducted in-depth interviews with business owners and trade associations throughout the state.
- Customer Research International (CRI), a minority-owned telephone survey firm in San Marcos, Texas. Under BBC's direction, CRI conducted telephone interviews with several thousand transportation construction and engineering companies across Oklahoma.

The study team began its research effort in July 2009 and completed the final report in fall 2010.

C. Study Scope

This study team examined the transportation contracting industry in Oklahoma and related ODOT contracts and subcontracts.

Information reviewed to develop disparity study framework. BBC's methodology for this disparity study reflects a review of information including:

- Provisions in 49 CFR Part 26;
- Guidance from USDOT related to implementing the Federal DBE Program and conducting related analyses;
- Relevant court decisions (see Appendix A);
- Recommendations for disparity studies by the U.S. Commission on Civil Rights; ²⁰
- Suggestions made by critics of disparity studies;²¹ and
- Other disparity studies conducted throughout the country.

Racial/ethnic/gender groups examined in the study. Disadvantaged business enterprises (DBEs) are defined in the Federal DBE Program.²² A DBE is a small business owned and controlled by one or more individuals who are socially and economically disadvantaged. The Federal DBE

²⁰ U.S. Commission on Civil Rights. May 2006. Disparity Studies as Evidence of Discrimination in Federal Contracting: A Briefing Before The United States Commission on Civil Rights Held in Washington, D.C., December 16, 2005. http://www.usccr.gov/pubs/DisparityStudies5-2006.pdf.

²¹ See for example, La Noue, George R. 1991, revised edition 1994. *Local Officials' Guide to Minority Business Programs and Disparity Studies*. Washington, D.C.: National League of Cities. See also Transportation Research Board of the National Academies. 2010. *NCHRP Report 644 – Guidelines for Conducting a Disparity and Availability Study for the Federal DBE Program*. Prepared for the National Cooperative Highway Research Program. http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_644.pdf.

²² 49 CFR Section 26.5.

Program specifies the racial, ethnic and gender groups that can be presumed to be socially disadvantaged:

- Black Americans (or "African Americans" in this study);
- Hispanic Americans;
- Native Americans;
- Asian-Pacific Americans;
- Subcontinent Asian Americans; and
- Women of any race or ethnicity.

Economic disadvantage is based on firm revenue and personal net worth limits, below which firms and firm owners must fall to be eligible for DBE certification:

- Gross revenue must not exceed \$22,410,000, with lower limits for certain lines of business. ²³
- Personal net worth must not exceed \$750,000, not including equity in the business and in personal residence.²⁴

White male-owned firms can also meet the federal certification requirements and be certified as DBEs. (Few white male-owned firms, however, apply for DBE certification. ODOT currently has one certified white-male DBE.)

In this study:

- The term "DBEs" refers to disadvantaged business enterprises that have been certified as such according to the federal definitions in 49 CFR Part 26.
- "MBEs" and "WBEs" are firms owned and controlled by minorities or women, according to the race/ethnicity definitions listed above, regardless of whether they are certified or meet the revenue and net worth requirements for certification.
- BBC's term "potentially-certified DBEs" refers to firms that are or could be certified as DBEs given BBC's information about firm size and the race/ethnicity/gender of firm owners.

Quantitative, qualitative and other information examined in the study. The disparity study collected and analyzed information on topics including the following.

http://www.dotcr.ost.dot.gov/asp/dbe.asp

²³ http://www.dotcr.ost.dot.gov/asp/dbe.asp

²⁴ 49 CFR Subpart D. 75 However, the personal net worth limit may change. Federal Register 25815 (May 10, 2010) (Notice of proposed rulemaking) suggests that \$750,000 may be changed to \$1.31 million. The comment period for this proposed change closes July 9, 2010.

- The study team defined the geographic area and construction/engineering subindustries that are the focus of the study based on analysis of ODOT contractors and subcontractors (see Section II).
- Section III presents information on local marketplace conditions. The study team examined whether there is any evidence of barriers for minorities and women to enter, advance within and start construction and engineering businesses in the local marketplace. BBC also analyzed access to business credit, insurance and bonding; different measures of business success; access to prime contract and subcontract opportunities; and other issues potentially affecting minorities and women in the local marketplace. Quantitative and qualitative information is included in this assessment, including results of interviews with business owners throughout the state.
- Based on analysis of contract and subcontract opportunities, and information collected through telephone interviews on the availability of businesses to perform this work, BBC determined the relative availability of minority- and women-owned firms for ODOT contracts and subcontracts (see Section IV). BBC also presents information on ODOT's "base figure" for its overall annual DBE goal.
- The study team analyzed utilization of minority- and women-owned firms on ODOT construction and engineering contracts and subcontracts (see **Section V**).
- BBC compared ODOT's utilization of minority- and women-owned firms with the availability of firms to perform this work. **Section VI** presents this disparity analysis.
- Section VII examines possible explanations for why any disparities occurred. The study team compared utilization and availability for subsets of ODOT contracts, and analyzed how ODOT reviewed bids and proposals of minority- and women-owned firms across a random sample of past ODOT contracts.
- Based on the information discussed above, BBC presents information in Section VIII for ODOT to consider when establishing its overall annual goal for DBE participation.
- Section IX provides a framework and relevant information for ODOT to review and consider in its determination of what percentage of its overall annual DBE goal can be achieved through neutral means, whether any race-conscious programs are appropriate under the federal regulations, and what DBE groups might be eligible for any race-conscious programs.
- Information ODOT can use in its future implementation of the Federal DBE Program is summarized in **Section X**. The study team evaluated a range of potential changes to ODOT's implementation of the Program. **Section X** presents a similar summary of programs ODOT might implement for state-funded contracts.

SECTION II. Types and Locations of ODOT Transportation Contracts

Section II describes (a) how BBC collected and analyzed ODOT prime contract and subcontract data; (b) the construction, engineering and other subindustries involved in ODOT transportation contracts; and (c) how BBC defined the relevant geographic market area for ODOT contracting.

A. Collection and Analysis of Prime Contract and Subcontract Data

BBC identified firms receiving ODOT prime contracts and subcontracts from Department records and information from prime contractors.

- The study period is July 1, 2004 through June 30, 2009. (The end date was chosen so that the most recent fiscal year's data were available for analysis when BBC initiated the disparity study in August 2009.) Date of the contract was usually determined from the award date.
- BBC examined FHWA- and state-funded contracts.
 - ➤ The study team identified 6,306 FHWA-funded contracts awarded during the study period totaling \$2.9 billion. ¹
 - ➤ The 1,685 state-funded contracts examined for the study period totaled \$453 million. Contract records were used to determine whether or not ODOT treated a contract as FHWA-funded.
- BBC determined contract and subcontract size based on dollars at time of contract award, unless these data were not available, in which case payments to the prime contractor and/or subcontractor were used.
- BBC differentiated between dollars going to prime contractors and to subcontractors.
 - ➤ Subcontract dollars are the dollar amounts committed to subcontractors at time of award or at time of the addition of the subcontractor to the project. If those data were not available, BBC used information from invoices, information from prime contractors or other sources.
 - ➤ BBC calculated the dollars to the prime contractor as the total contract amount less the dollars listed for any subcontractors/suppliers.

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¹ One dollar of FHWA funding causes ODOT to treat a contract as FHWA-funded even if state or local funding is also involved

² This method of collecting subcontracting data ensured consistency in the information for MBE/WBE and non-minority-owned firms.

The databases ODOT uses to track construction contracts contained relatively complete information for prime contractors and subcontractors. Prime contractors awarded construction contracts must submit information on proposed subcontractors to ODOT for approval. ODOT contract databases for engineering and other professional services contracts contain comprehensive information for the prime consultants, but not subconsultants. BBC collected information on subconsultants performing work on ODOT engineering and related professional services contracts through the following steps:

- The study team collected hardcopy contract files for contracts with at least one task order or agreement valued at more than \$100,000 awarded during the study period. ODOT engineering-related contract elements exceeding \$100,000 tend to have the most opportunities for utilization of subconsultants.
- For each of these 257 contracts, BBC contacted the prime consultant via mail, email and phone to request information about their award and subcontractors.
- Prime consultants were asked to verify subconsultant names, contact information, award amount and amount paid during the study period.
- Responses from prime consultants were received for 206 contracts, accounting for \$143 million. Through this effort, BBC obtained data accounting for about 83 percent of professional services contract dollars for surveyed primes with contract elements exceeding \$100,000.

Appendix B provides additional information about prime contract and subcontract data collection procedures.

B. Types of ODOT Work

BBC coded prime contracts and subcontracts for ODOT transportation projects into the 15+ specific subindustries listed in Figure II-1.

Prime contracts for which the type of work could not be determined were grouped as "other construction" and "other engineering services." These categories of work also include miscellaneous types of construction and engineering services that represent a relatively low volume of ODOT contract dollars.

Construction prime contracts. BBC identified the subindustry for each construction contract (prime contract portion) based on ODOT information in the contract files, telephone interviews with contractors, Dun & Bradstreet information about contractors and other records. ODOT classifies work into six categories:

- Grading;
- Drainage structures;
- Paving;
- Bridge;
- Traffic control; and
- Other construction.

BBC identified more specific types of work based on ODOT contract descriptions and the primary line of work for the contractor performing that work. Once BBC completed the initial coding of work types, ODOT staff reviewed these data.

Construction subcontracts, professional services prime contracts and professional services subcontracts. ODOT contract records for construction subcontracts do not include codes for work type. ODOT records for engineering and related professional services also do not contain codes for type of work involved. BBC used information about the primary line of work for firms performing these prime contracts and subcontracts to develop initial coding of these contract elements. BBC also reviewed any descriptions of work provided in ODOT contract files. Once BBC made an initial determination of work type, ODOT staff reviewed these data.

Procurements typically not included in a BBC disparity study. When examining FHWA-funded contracts, BBC identified and excluded the following types of contracts:

- Contracts that did not involve the planning, design, building, maintenance or repair of transportation infrastructure;
- Real estate or other real property (purchases or leases), legal services (which are often dollars for real property), business services and consulting; and
- Contracts with not-for-profit agencies, associations or government (however, contracts and subcontracts with tribally-owned businesses are included).

Figure II-1.

Dollars of ODOT prime contracts and subcontracts for types of work examined in the disparity study, July 2004—June 2009

_	Funding Source (in thousands)		
Sub-industry/procurement area	FHWA	Non-FHWA	Total
Construction			
Highway construction	\$1,557,854	\$235,336	\$1,793,190
Bridge construction and repair	471,644	87,510	559,154
Construction supplies	204,648	49,257	253,905
Excavation, grading and erosion control	150,506	13,277	163,782
Electrical, lighting and signals	68,749	5,508	74,258
Painting and striping	41,283	1,680	42,963
Trucking and hauling	41,656	179	41,835
Machinery and equipment	31,542	7,569	39,111
Drainage structures and utilities	32,070	2,356	34,426
Traffic control	25,143	5,624	30,767
Fencing, guardrail and barriers	24,938	3,774	28,713
Other construction services	10,774	1,448	12,222
Construction Total	\$2,660,807	\$413,519	\$3,074,326
Engineering and professional services			
Engineering services	\$135,982	\$33,352	\$169,333
Consulting and research	47,014	4,366	51,380
Surveying and mapping services	7,292	1,477	8,768
Engineering Total	\$190,287	\$39,194	\$229,481
Total	\$3,041,381	\$452,714	\$3,303,808

Note: Dollars may not add to totals due to rounding.

Source: BBC Research & Consulting.

C. Geographic Distribution of FHWA-funded Contract and Subcontract Dollars

Each state and local agency must tailor its implementation of the Federal DBE Program based on conditions in its local marketplace. Therefore, BBC examined the geographic distribution of ODOT prime contract and subcontract dollars by location of firms performing this work.

State-by-state distribution of contractors performing ODOT work. Some out-of-state construction firms have submitted pre-qualification information to ODOT, and ODOT's bidders list for professional services contracts includes some non-local businesses. Even so, a large proportion of ODOT prime contract and subcontract dollars for construction and engineering services go to firms with locations in Oklahoma. Figure II-2 presents the percentage of July 2004–June 2009 FHWA contract dollars going to firms located in Oklahoma and surrounding states. As shown, firms with Oklahoma locations performed 87 percent of ODOT's FHWA-funded work. Collectively, firms in surrounding states accounted for 8 percent of ODOT FHWA-funded contract dollars. Firms located beyond the states shown in Figure II-2 received 5 percent of FHWA-funded contract dollars. Based on this analysis, BBC defined the local market area as Oklahoma. BBC's quantitative and qualitative analyses focused on the state.

Figure II-2.

Percentage of ODOT FHWA-funded prime contract and subcontract dollars awarded to firms located in Oklahoma and surrounding states, July 2004-June 2009



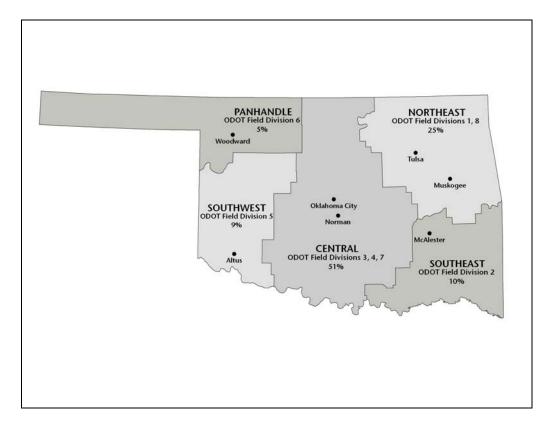
Source: BBC Research & Consulting based on ODOT contract data.

Location of work within Oklahoma. One of the factors BBC considers in determining availability of firms for specific prime contracts and subcontracts is the geographic location of the work, which makes it important to analyze the geographic distribution of work within the state. In consultation with ODOT staff, BBC defined major regions within the state based on ODOT divisions:

- Northeast Oklahoma includes ODOT Divisions 1 and 8;
- *Southeast Oklahoma* corresponds to Division 2;
- Central Oklahoma combines Divisions 3, 4 and 7;
- Oklahoma Panhandle corresponds to Division 6; and
- Southwest Oklahoma refers to Division 5.

Figure II-3 maps the dollars of contracts by project location. For example, about \$695 million of FHWA-funded contracts involved construction or engineering work on projects located in Northeast Oklahoma (note that some of the contractors doing the work in Northeast Oklahoma came from other regions).

Figure II-3.
Location of ODOT FHWA-funded projects, by dollars, for Oklahoma regions, July 2004-June 2009



Source: BBC Research & Consulting based on ODOT contract data.

SECTION III. Conditions for Minorities and Women in the Local Marketplace

Federal courts have found that Congress "spent decades compiling evidence of race discrimination in government highway contracting, of barriers to the formation of minority-owned construction businesses, and of barriers to entry." Congress found that discrimination had impeded the formation and expansion of qualified minority business enterprises.

BBC examined whether barriers for minority- and women-owned firms found on a national level also appear in the Oklahoma construction and engineering industries. Such barriers could affect MBE/WBE availability and utilization for ODOT construction and engineering-related contacts. BBC examined the Oklahoma marketplace primarily in four areas:

- A. Entry and advancement;
- B. Business ownership;
- C. Access to business credit, bonding and insurance; and
- D. Success of businesses.

Appendices D through G present quantitative information concerning the Oklahoma marketplace, and Appendix I presents qualitative information that the study team collected through 59 in-depth personal interviews with business owners and others throughout the state.

A. Entry and Advancement

BBC examined the representation of minorities and women in the Oklahoma construction and engineering workforce relative to all industries. In addition, the study team compared the advancement of minorities and women into supervisory or managerial roles to the advancement of non-Hispanic whites and males. As discussed in Appendix D, a number of studies throughout the United States have taken the position that race and gender discrimination has affected the employment and advancement of certain groups in the construction and engineering industry.

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¹ Sherbrooke Turf, Inc., 345 F.3d at 970, (citing Adarand Constructors, Inc., 228 F.3d at 1167 – 76 (10th Cir. 2001)); Western States Paving Co. v. Washington State DOT, 407 F.3d 983 (9th Cir. 2005) at 992.

² As in other sections of the report, the term "MBE/WBEs" refers to minority business enterprises and women business enterprises, whether or not they are certified as MBEs, WBEs or DBEs. Disadvantaged business enterprises (DBEs) are a subset of MBE/WBEs in this report.

Quantitative information about entry and advancement in construction.

Quantitative analysis of the Oklahoma marketplace — based primarily on data from the 2000 U.S. Census and the 2008 American Community Survey (ACS) — showed that certain MBE/WBE groups appear to be underrepresented in the construction industry compared to all industries considered together. In addition, some of those groups appear to face barriers regarding advancement to supervisory or managerial positions (see Appendix D).

Analysis of the Oklahoma construction industry revealed patterns of entry and advancement that were similar to those found for the United States as a whole.

- Only 4 percent of the Oklahoma construction industry was made up of African Americans in 2008, compared to 8 percent of the entire Oklahoma workforce. Eight percent of Oklahoma construction workers in 2008 were women, less than one-fifth of the representation of women across all industries (46%).
- Among construction workers, Hispanic Americans, African Americans and women were less likely than non-Hispanic whites and men to advance to the level of first-line supervisor. In addition, relatively few Hispanic Americans, Native Americans and women working in construction in Oklahoma reached the level of manager.
- Because the average educational attainment of the above MBE/WBE groups was generally consistent with educational requirements for construction jobs, factors other than formal education may be behind the relatively low representation of certain groups in the construction industry and the relatively low representation of those groups working in supervisory and managerial roles.

Quantitative information about entry and advancement in engineering. BBC also used 2000 U.S. Census data and 2008 ACS data to examine employment and advancement for different racial/ethnic/gender groups in the Oklahoma engineering industry. As with construction, certain MBE/WBE groups were underrepresented in the engineering industry, particularly in supervisory and managerial roles. Those patterns were found both in Oklahoma and nationally.

Education is an important factor for entry and advancement in the engineering industry. A four-year college degree in engineering is an important qualification in that industry. Barriers to education may affect employment and advancement for certain minority groups.

- College education appears to be a barrier in Oklahoma for African Americans, Hispanic Americans and Native Americans. Among those in the Oklahoma workforce age 25 and older, the percentage of African Americans, Hispanic Americans and Native Americans with at least a bachelor's degree was substantially lower than that of non-Hispanic whites in both 2000 and 2008.
- Women represented a relatively large proportion of college-educated adults in Oklahoma, indicating that factors other than education may explain gender-related disparities in the Oklahoma engineering industry.

After accounting for college education, there were disparities in the number of certain minority groups and women working in civil engineering in Oklahoma.³

- In 2000, there was relatively low representation of African Americans and Hispanic Americans in civil engineering compared to the entire college-educated Oklahoma workforce (ages 25 and older). However, those differences were not statistically significant, possibly to due to small sample sizes.
- Women were also underrepresented in civil engineering. In 2000, women were 16 percent of civil engineers but were 45 percent of the entire college-educated Oklahoma workforce (age 25 and older). That difference was statistically significant.

Qualitative information about entry and advancement. BBC conducted in-depth interviews with Oklahoma businesses and trade associations that provided information about barriers that minorities and women may face regarding entry and advancement in the Oklahoma construction and engineering industries.

Several interviewees indicated difficulties associated with entry and advancement in the Oklahoma construction industry for minorities and women. They indicated that such difficulties exist in many forms, including: unfavorable work environments, stereotypical attitudes or offensive comments or behavior. Other interviewees cited no experience or knowledge of unfavorable work environments in Oklahoma.

- Some interviewees reported stereotypical attitudes on the part of customers and buyers in Oklahoma as a contributor to unfavorable work environments for minorities or women Oklahoma. For example, a representative from a bank that has provided financing to African American and Hispanic-owned engineering and construction firms that work with ODOT said that stereotypical attitudes against minorities and women is a barrier. He said that African American engineers are often seen as not smart enough to be engineers. He stated that he thought that this perception was industry-wide.
- Other interviewees reported instances of racial slurs or sexist comments. For example, an interviewee representing a DBE-certified construction firm stated that they often experience offensive comments such as "that black so-and-so" and being called the N-word to their faces. An Asian American Indian president and owner of a civil engineering firm commented, "There are some ignorant people who [engage in harassment]." He continued, "They will just let me know that I'm not one of them." He commented that this discrimination depends "upon the education of the person.... Some of them can be really derogatory."
- Other interviewees reported that they were unaware of unfavorable work environments and derogatory attitudes towards minority and women or that such behavior was once prevalent but has since declined. For example, an interviewee representing a Native American male-owned general contracting company reported that he was aware of

³ BBC's analyses of the engineering industry focused on civil engineers because limited data were available from other engineering disciplines.

unfavorable work environments for minorities and women in the past but not in the last 15 years. He said that he thinks that discriminatory attitudes still exist, but there have nonetheless been true advances and less discrimination.

Effects of entry and advancement barriers on the Oklahoma marketplace. The barriers that certain minority groups and women appear to face entering and advancing within the Oklahoma construction and engineering industries may have substantial effects on business outcomes for minority- and women-owned firms.

- Typically, employment and advancement are preconditions to business ownership in the construction and engineering industries. Because disparities exist in entry and advancement for certain MBE/WBE groups, it follows that those disparities may prevent some minority- and women-owned businesses from ever forming, reducing overall MBE/WBE availability in the Oklahoma marketplace.
- Quantitative and qualitative evidence suggests that certain minority groups and women are underrepresented in the Oklahoma construction and engineering industries, particularly in supervisory and managerial roles. Such underrepresentation may perpetuate beliefs and stereotypical attitudes that firms owned by those groups for example, African Americans and women may not be as qualified as majority-owned firms. Those beliefs may make it more difficult for MBE/WBEs to win work in Oklahoma, including work with ODOT and other public organizations.
- Because of the nature of entry and advancement data, it is difficult to quantify the effect that associated barriers may have had on ODOT availability and utilization during the study period.

B. Business Ownership

Prior studies have found that race, ethnicity and gender affect opportunities for business ownership, even after accounting for other factors. Figure III-1 summarizes how courts have used those studies when considering implementation of the Federal DBE Program in other states.

BBC examined whether there are disparities in business ownership for minorities and women in the Oklahoma workforce compared to non-Hispanic white males. The study team developed regression models of business ownership rates using 2000 Census data for the Oklahoma construction and engineering industries. The models identified disparities for certain minority groups and women after accounting for personal characteristics including education, age and ability to speak English. For groups exhibiting statistically significant disparities, BBC compared actual business ownership rates with simulated

Figure III-1. Use of regression models of business ownership in defense of the Federal DBE Program

State and federal courts have considered disparities in business ownership rates when reviewing implementation of the Federal DBE Program, particularly when considering DBE participation goals. For example, disparity studies in Minnesota and Illinois used regression models to analyze the impact of race/ethnicity/ gender on business ownership in the combined construction and engineering industry. Results from those models helped determine whether race- and gender-based disparities exist after statistically controlling for other personal characteristics. Those analyses, which were based on 2000 Census data, were included in materials submitted to courts in subsequent litigation concerning implementation of the Federal DBE Program. BBC used the same sources of data and similar regression models to analyze business ownership in Oklahoma.

rates if those groups, based on personal characteristics, owned businesses at the same rate as similarly-situated non-Hispanic white males. Appendix E provides details about BBC's quantitative analyses of business ownership rates in the Oklahoma marketplace.

Quantitative information about business ownership in construction. Quantitative analysis of the Oklahoma construction industry revealed statistically significant disparities in business ownership for several racial/ethnic/gender groups, after accounting for various neutral factors such as age, personal net worth, ability to speak English and education. Compared to non-Hispanic whites and non-Hispanic white males, BBC observed significant disparities for:

- African Americans;
- Hispanic Americans;
- Native Americans; and
- White women.

For each of the minority groups above, Figure III-2 compares observed business ownership rates to simulated business ownership rates if those groups owned construction businesses at the same rate as similarly-situated non-Hispanics whites (i.e., "benchmark business ownership rate"). The study team also generated similar simulations for non-Hispanic white women compared to non-Hispanic white men.

The study team calculated a business ownership disparity index for each group by dividing the observed business ownership rate by the benchmark business ownership rate (and then multiplying by 100). A value of 100 would indicate "parity" in business ownership rates; a small index indicates a larger disparity. Results indicate that:

- Compared to similarly-situated non-Hispanic whites, there were large disparities in business ownership rates for African Americans (disparity index of 54) and Hispanic Americans (disparity index of 59) working in the Oklahoma construction industry. There was also a large disparity for non-Hispanic white women (disparity index of 62) compared to non-Hispanic white men.
- Fewer Native American construction workers owned businesses than similarly-situated non-Hispanic whites, but the disparity for Native Americans was not as large as for other groups (disparity index of 86).

The above analyses are based on 2000 Census data, due to the large size of this dataset. Note that there is some evidence based on a smaller dataset for 2008 suggesting that business ownership rates between minority and non-minority workers were more similar than in 2000, as discussed in Appendix E. This narrowing in business ownership rates may also be occurring between women and men.

As the U.S. Census Bureau collects additional data for more recent time periods, one can explore whether disparities in business ownership rates in the Oklahoma construction industry are declining.

Figure III-2.

Comparison of actual and simulated construction business ownership rates in Oklahoma for groups exhibiting statistically significant disparities

	Self-empl	oyment rate	Disparity index		
Group	Actual Benchmark		(100 = parity)		
African American	14.2%	26.4%	54		
Hispanic American	9.3%	15.9%	59		
Native American	24.4%	28.2%	86		
White female	22.0%	35.6%	62		

Note: As the benchmark figure can only be estimated for records with an observed dependent variable, comparison is made with only this subset of the sample. For this reason, actual self-employment rates may differ slightly from those in Figure E-1.

Source: BBC Research & Consulting from statistical models of 2000 Census of Population data.

Quantitative information about business ownership in engineering. As with construction, BBC examined disparities in business ownership rates for minorities and non-Hispanic white women working in the Oklahoma engineering industry compared to non-Hispanic whites and non-Hispanic white males. 4 After accounting for neutral factors, BBC still observed significant disparities for:

- African Americans;
- Hispanic Americans;
- Other minorities; and
- White women.

Figure III-3 compares actual business ownership rates for these groups to simulated benchmark business ownership rates if individuals in these groups owned engineering businesses at the same rate as similarly-situated non-Hispanics whites and non-Hispanic white males. Results indicate that:

- African Americans (disparity index of 32) and other-race minorities (disparity index of 36) exhibited the largest disparities in business ownership rates in the engineering industry, compared to similarly-situated non-Hispanic whites.
- The observed business ownership rate for Hispanic Americans was roughly two-thirds the expected rate if Hispanic Americans owned engineering businesses at the same rate as similarly-situated non-Hispanic whites.

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⁴ Sufficient data to develop statistical models were only available for the West South Central region of the U.S., which includes Oklahoma, Texas, Arkansas and Louisiana.

A disparity index of 75 indicates that white women working in the West South Central engineering industry own engineering firms at three-quarters the rate of similarly-situated white men.

Figure III-3.

Comparison of actual and simulated engineering business ownership rates in the West South Central region for groups exhibiting statistically significant disparities

_	•	oyment rate	Disparity index
Group	Actual	Benchmark	(100 = parity)
African American	3.1%	9.7%	32
Hispanic American	6.3%	9.5%	66
Other minority	5.4%	15.0%	36
White female	9.5%	12.6%	75

Note: As the benchmark figure can only be estimated for records with an observed dependent variable, comparison is made with only this subset of the sample. For this reason, actual self-employment rates may differ slightly from those in Figure E-2.

Source: BBC Research & Consulting from statistical models of 2000 Census of Population data.

Qualitative information about business ownership. BBC conducted in-depth interviews with Oklahoma businesses and business and trade associations that provided information about barriers minorities and women may face regarding business ownership in the Oklahoma construction and engineering industries. A number of interviewees cited difficulties associated with meeting the preconditions of starting and maintaining a business such as gaining the necessary experience and attracting qualified personnel.

- Some interviewees discussed the challenge of having enough expertise but not enough experience to get work. For example, an African American male owner of a DBE-certified safety and environmental consulting firm stated that when he started his business, he had the expertise but did not have the experience and track record of performing on projects. He noted that he has seen other, similarly-situated firms that have grown because they were given the opportunity to do work but that his firm has not been given the same opportunities needed to grow.
- Other interviewees discussed challenges associated with personnel and labor such as competing against undocumented workers and paying high salaries. For example, the male vice president and female president of an African American-owned concrete company reported that their bids are constantly undercut by those who hire illegal immigrants. He reported that he does not hire illegal immigrants, so he has to pay higher wages. Related to issues with personnel and labor, the Native American owner of an engineering firm said that access to labor and personnel is particularly a problem for MBE/WBEs: "If you're looking for people that have a lot of construction experience, that are white-collar engineering, mechanical engineering, civil engineering, program management-type of people, I imagine it's going to be a lot harder for a small minority company to access that ... because they're not going to be able to pay the required salaries...."

Effects of business ownership barriers on the Oklahoma marketplace. The barriers that certain minority groups and women face regarding business ownership in the Oklahoma construction and engineering industries may have substantial effects on business outcomes for minority- and women-owned firms.

- Quantitative and qualitative evidence suggests that disparities exist for certain minority groups and women in owning construction and engineering businesses. There is evidence that some number of minority- and women-owned firms may have never formed as a result of different barriers related to race, ethnicity and gender in Oklahoma.
- Section VIII of this report provides quantitative analyses of the effect of race and gender disparities in business ownership on the availability of MBE/WBEs for ODOT construction and engineering contracts.

C. Access to Capital, Bonding and Insurance

Access to capital represents one of the key factors that researchers have examined when studying business formation and success. If discrimination exists in capital markets, minorities and women may have difficulty acquiring the capital necessary to start or expand a business, as discussed in Appendix G. BBC examined whether minorities and women have access to capital — both home mortgage lending and business capital — that is comparable to that of non-Hispanic whites and non-Hispanic white males. In addition, the study team examined qualitative information about whether minorities and women face any barriers in obtaining bonding and insurance.

Quantitative information about home mortgage lending. Wealth created through homeownership can be an important source of funds to start or expand a business. Barriers to homeownership or home equity can affect business opportunities by limiting the availability of funds for new or expanding businesses. BBC analyzed potential effects of race/ethnicity/gender on homeownership and mortgage lending. Key findings indicated that, compared to non-Hispanic whites:

- Relatively few African Americans, Hispanic Americans and Native Americans in Oklahoma own homes.
- African Americans, Hispanic Americans and Native Americans who own homes tend to have lower home values.
- African Americans, Hispanic Americans and Native Americans applying for home mortgages in Oklahoma are more likely to have their applications denied.
- African American, Hispanic American and Native American mortgage borrowers are more likely to have subprime loans.

Quantitative information about business credit. Business credit is also an important source of funds for small businesses. Any race- or gender-based barriers in the application or approval processes of business loans could affect the formation and success of minority- and women-owned businesses. To examine the role of race/ethnicity/gender in business capital markets, the study team analyzed data from the Federal Reserve Board's 1998 and 2003 Survey of Small Business Finances (SSBF). ⁵

BBC developed regression models of loan outcomes based on SSBF data to examine outcomes for minority- and women-owned firms after statistically controlling for neutral factors. Compared to non-Hispanic whites, BBC observed significant disparities in loan approval rates for African American- and Hispanic-owned firms. In addition, when they receive loans, African American- and Hispanic-owned firms generally pay higher interest rates.

Figure III-4 compares observed loan approval rates for African Americans and Hispanic Americans to simulated benchmark loan approval rates if those groups were approved for business loans at the same rate as similarly-situated non-Hispanics whites. Results indicate that:

- African Americans were approved for business loans at a rate that is less than two-thirds (disparity index of 59) that of similarly-situated non-Hispanic whites.
- Hispanic Americans were also approved for business loans at a rate lower than non-Hispanic whites (disparity index of 77).

Figure III-4.
Comparison of actual and simulated business loan approval rates in the West South Central region for groups exhibiting statistically significant disparities

Group	Loan approval rates Actual Benchmark		Disparity index (100 = parity)
African Americans	46.4%	78.2%	59
Hispanic Americans	53.7%	69.8%	77

Note: Actual approval rates presented here and denial rates in Figure G-8 do not sum to 100% due to some observations being dropped in the probit regression.

Source: BBC Research & Consulting analysis of 1998 SSBF data.

⁵ The 1998 and 2003 SSBF data were the most recent available at the time of this study. Because SSBF records the geographic location of firms by Census Division, not by state, BBC examined data for the West South Central region, which includes Oklahoma, Texas, Arkansas and Louisiana.

Qualitative information about access to credit. BBC conducted in-depth interviews with Oklahoma businesses and trade associations that provided information about barriers that minorities and women may face when attempting to obtain credit, bonding and insurance.

- Several interviewees reported that business credit is difficult to obtain and many reported race and gender discrimination as factors of denial. For example, a Hispanic male owner of a concrete paving firm stated, "If we go apply for a bank loan and try to borrow \$50,000–100,000 dollars, there is just disapproval after disapproval." Another interviewee, an African American female business development specialist for a non-profit organization, stated that the problem with race- and gender-based discrimination in the credit industry is that no one comes out and says, "I'm not going to give this [loan] to you because of your race." She stated that you can, however, recognize the disparity in the small number of minority or small companies that are getting financing and bonding.
- Some interviewees reported that they were denied financing for reasons other than race or gender discrimination. For example, a representative from a Hispanic male-owned construction firm reported that when he started his business, he was unable to obtain financing from the bank. Instead, he borrowed money from a friend and from the company where he used to work. He stated that the bank did not engage in discrimination when denying him financing, but rather denied his loan because he did not have collateral.

Qualitative information about bonding and insurance. Interviewees also provided information about potential barriers that minority- and women-owned firms face when trying to obtain bonding and insurance.

- Some interviewees reported that obtaining bonding and meeting bonding requirements are barriers to doing business. For example, a Native American male president of a WBE construction firm stated that he believes that problems with access to bonding are based on discrimination targeted at small firms. He noted that smaller firms get charged higher premium rates. Another firm representing a Hispanic American male-owned concrete paving firm said that bonding requirements and access to lines of credit "exclude DBEs right off the bat" because most DBEs "cannot get a half a million dollar bond."
- A number of interviewees also reported that obtaining insurance was a barrier to MBE/WBE firms. For example, the African American male and female owners of a DBE-certified construction firm stated that they have had personal experience with obtaining insurance and with insurance requirements and believe that race- and genderbased discrimination plays a role. They stated that when it was time for their firm to renew its general liability policy, they went into an agency in El Reno and the company refused to even quote a policy.

■ BBC also completed telephone interviews with Oklahoma businesses, firm owners and managers and asked if they had experienced barriers or difficulties associated with bonding and insurance. Minority- and women-owned firms were nearly twice as likely as majority-owned firms to report difficulties obtaining bonding. Minority-owned firms were nearly twice as likely as majority-owned firms to report that insurance requirements were a barrier. WBEs were slightly more likely than majority-owned firms to report that insurance requirements were a barrier. Some firms indicated that barriers associated with bonding and insurance prevent minority- and women-owned firms from growing and that bonding is nearly impossible to obtain for small firms.

Effects of access to capital, bonding and insurance barriers on the Oklahoma marketplace. The disadvantages for certain MBE/WBE groups associated with access to capital, bonding and insurance may affect various business outcomes for minority- and women-owned firms.

- Quantitative and qualitative evidence suggests that it is more difficult for certain minority groups and women to obtain capital, bonding and insurance. Such difficulties may prevent some minority- and women-owned businesses from ever forming, reducing overall MBE/WBE availability in the Oklahoma marketplace.
- Access to capital, bonding and insurance are often required for businesses to expand. Particularly in the public sector, large construction and engineering contracts demand more from firms in terms of financing, bonding and insurance. Because disparities exist in access to those markets for certain MBE/WBE groups, it follows that those disparities may make it difficult for existing MBE/WBE firms to compete for large transportation contracts, reducing overall MBE/WBE utilization in the Oklahoma marketplace.
- Because of the nature of the data pertaining to the credit, bonding and insurance markets, it is difficult to quantify the effect that associated barriers may have had on ODOT availability and utilization during the study period.

D. Success of Businesses

BBC completed quantitative and qualitative analyses that assessed whether the success of minority-and women-owned businesses differ from that of majority-owned businesses in the Oklahoma construction and engineering industries. The study team examined business success primarily in terms of business closures, contractions and expansions, and in terms of business receipts and earnings. Appendix F provides details about BBC's quantitative analyses of business success measures.

Quantitative analysis of business closures, contractions and expansions. BBC used the most recent available analyses of U.S. Small Business Administration (SBA) data to examine business closures, contractions and expansions in Oklahoma and in the U.S. as a whole. The SBA analyses compared business outcomes for minority-owned firms to business outcomes for all firms considered together for 1997 to 2001. Findings indicated greater rates of business closure for certain minority

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⁶ Data were available for all industries considered together and for the construction industry. Data were not available for the engineering industry alone. In addition, data were not available for women-owned firms alone.

groups but that the percentage of minority-owned firms expanding compared favorably to all firms in Oklahoma.

Quantitative analysis of business receipts and earnings. The study team also examined business receipts and earnings of construction and engineering firms in Oklahoma as indicators of business success. BBC analyzed gross receipts and business owner earnings data from the U.S. Census Bureau as well as annual revenue data from availability telephone interviews that the study team conducted. Findings showed several key differences between MBE/WBEs and majority-owned firms in terms of business receipts and earnings:

- Data from the 2002 Survey of Business Owners showed that, on average, minority- and women-owned Oklahoma firms with paid employees earned substantially less in gross revenue than all firms considered together (\$2,794,000 annually). Of all MBE/WBE groups, African American-owned firms (\$522,000 annually) and Asian American-owned firms (\$513,000 annually) showed the lowest gross revenues. Those findings were consistent with findings when only considering construction firms.⁷
- Based on 2000 U.S. Census data, minority and women construction and engineering business owners in Oklahoma earned less than non-Hispanic white and male business owners. However, those differences were not statistically significant, possibly due to relatively small sample sizes.⁸

The study team also developed regression models of business owner earnings in the West South Central region based on 2000 U.S. Census data. The models examined the impact of race/ethnicity/gender on business owner earnings after statistically controlling for neutral factors.

- In the construction industry, BBC observed statistically significant disparities for African Americans, Hispanic Americans and women.
- In the engineering industry, BBC observed statistically significant disparities for Native Americans and women.

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⁷ Analogous data were not available for engineering firms alone.

⁸ Sufficient data for engineering were only available for the West South Central region of the U.S., which includes Oklahoma, Texas, Arkansas and Louisiana.

Qualitative information about success of businesses. Responses that the study team gathered from in-depth interviews with Oklahoma businesses and business and trade associations provided information about barriers that minorities and women may face that may help explain race- and gender-based disparities in business success in the Oklahoma construction and engineering industries.

Several interviewees described difficulties that may affect business success for MBE/WBEs in the Oklahoma construction and engineering industries. Interviewees discussed participation in private and public sectors, participation as prime- and subcontractors, and learning about bid opportunities.

- Some interviewees reported that there was a trend toward either the private sector or the public sector because of difficulties for MBE/WBEs in the other sector. For example, a white male president of a civil engineering firm said that in order to obtain work in the private sector, one needs to know people and "be in the right circles." He stated that "it is easier for me to work in the public sector [but that will differ from firm to firm]." Another interviewee, representing a minority business development agency, stated that the marketplace has been trending towards private sector work because "red tape has gotten worse [in the public sector]." He stated that in the public sector, opportunities for work are often segmenting in such a way as to exceed the capacity of his clients.
- Many interviewees reported acting primarily as subcontractors, which they sometimes attributed to an inability to secure bonding or financing. For example, a Hispanic male owner of a concrete paving firm said that he has the knowledge and competence to work as a general contractor, but he does not have the financial backing. He said, "Bonding requirements and insurance play a major role [in allowing a subcontractor to develop into a prime contractor]." He added, "It takes a lot of money." Another interviewee, representing a white female-owned trucking company, also stated that her firm only works as a subcontractor because it takes so much money to perform as a prime contractor.
- Some interviewees representing MBE/WBE firms reported that they have experienced difficulties learning of opportunities. For example, the executive director of a Hispanic trade association said that learning of opportunities is a barrier and that "more information needs to be out in the Hispanic community in publications in Spanish and things of that nature." He said that there is not enough being done within the Hispanic community to help businesses. Another interviewee, representing a Hispanic male-owned construction firm, said that if a firm does not know about work opportunities and does not have someone to guide them or tell them about such opportunities, then they may find it difficult to be successful.

Effects that barriers have on business success in the Oklahoma marketplace. The disparities that certain MBE/WBE groups exhibited regarding business success may affect business outcomes for minority- and women-owned firms in the Oklahoma marketplace.

- Quantitative and qualitative analyses suggest that, in general, MBE/WBE firms may be less successful than majority-owned firms in Oklahoma. Differences in business success have manifested themselves in higher closure rates for certain MBE/WBE groups, potentially reducing overall MBE/WBE availability in the Oklahoma marketplace.
- Lower business receipts and earnings for certain MBE/WBE groups may make it difficult for existing MBE/WBE firms to obtain the resources to effectively compete for transportation construction and engineering contracts, particularly those contracts that are larger in size. Such limitations may reduce overall MBE/WBE utilization in the Oklahoma marketplace.
- Because of the nature of the data pertaining to business success, it is difficult to quantify
 the effect that associated barriers may have had on ODOT availability and utilization
 during the study period.

Summary

There is evidence of disparities in the Oklahoma construction and engineering industries for certain MBE/WBE groups that are related to:

- Entry and advancement;
- Business ownership;
- Access to business capital, bonding and insurance; and
- Success of businesses.

The information concerning Oklahoma marketplace conditions and barriers that MBE/WBEs face is important as ODOT considers:

- Setting its overall annual goal for DBE participation (explained further is Section VIII);
- Determining the extent to which it can achieve the goal through neutral efforts and the specific groups that might be included in any race- or gender-conscious elements of the Program, such as DBE contract goals (see Section IX);
- Specific measures to be included in its implementation of the Federal DBE Program (see Section X); and
- The need for ODOT programs concerning its non-federally-funded contracts (as discussed in Section XI).

SECTION IV. Analysis of MBE/WBE/DBE Availability

BBC analyzed the relative availability of minority- and women-owned firms that are ready, willing and able to perform ODOT prime contracts and subcontracts. Section IV contains eight parts:

- A. Purpose of the availability analysis;
- B. Collecting information on firms potentially available for ODOT work;
- C. Number of minority-, women- and majority-owned firms included in the availability database;
- D. Definitions of MBE/WBEs, DBEs and Potential DBEs;
- E. Calculation of MBE/WBE availability as inputs to the disparity analysis;
- F. Base figure for overall goal for DBE participation in FHWA-funded contracts;
- G. Implications for any DBE contract goals; and
- H. Further discussion of issues in an availability analysis.

Appendix C provides supporting information.

A. Purpose of the Availability Analysis

BBC developed information on the relative availability of minority- and women-owned firms for ODOT work as an input for the disparity analysis and for developing a base figure for ODOT's overall annual DBE goal.

Input for the disparity analysis. BBC's analysis of relative availability of minority- and womenowned firms for ODOT work provides an independent benchmark for use in the disparity analysis. In the disparity analysis, the percentage of ODOT contract dollars going to MBEs and WBEs (for each racial/ethnic/gender group) is compared to the percentage of dollars that would be expected to go to MBE/WBEs given their relative availability for specific types, sizes and locations of ODOT prime contracts and subcontracts.

Because BBC examined all firms owned by minorities and women as MBEs and WBEs in both utilization and availability inputs to the disparity analysis, all available firms that are minority- and women-owned firms were counted as such when determining MBE/WBE availability. The availability benchmarks for the disparity analysis examine all minority- and women-owned firms regardless of whether they are or could be certified as DBEs.

Inputs for the base figure analysis related to the overall DBE goal. When establishing its overall annual goal for DBE participation in its FHWA-funded contracts, ODOT must begin by calculating a "base figure" for the relative availability of DBEs. BBC's analysis of the base figure follows the same steps as determining MBE/WBE availability benchmarks for the disparity analysis, except minority- and women-owned firms that appear too large to be certified as DBEs are not counted as potential DBEs.

B. Collecting Information about Firms Potentially Available for ODOT Work

BBC's availability analysis focused on specific transportation construction and engineering subindustries in Oklahoma. Section II of the report discusses BBC's identification of specific subindustries for inclusion in the availability analysis, and selection of Oklahoma as the relevant market area for ODOT contracting.

Once the subindustries and relevant geographic market area were determined, BBC developed a database of available firms by attempting to interview each business establishment within the relevant Oklahoma construction and engineering subindustries. This method of examining availability is sometimes referred to as a "custom census."

Overview of the availability interviews. BBC collected information from firm owners and managers to identify firms potentially available for ODOT work.

BBC first obtained all business establishment listings under the eight-digit industry codes maintained by Dun & Bradstreet (D&B) that were most pertinent to the subindustries involved in ODOT transportation contracts. D&B provided 4,056 business listings related to these subindustries.

BBC then worked with the telephone survey research firm Customer Research International (CRI), which performs business and consumer interviews throughout the country, to conduct telephone interviews with the owners or managers of identified business establishments. About 2,900 D&B listings had accurate working phone numbers. CRI was able to successfully contact 2,145 (74%) of these business establishments.³ About 1,000 establishments that were successfully contacted indicated they were not interested in participating in a discussion about their availability for ODOT work.⁴ More than 1,000 firms completed interviews about firm characteristics, their interest and qualifications for ODOT work and other topics. Interview topics included:

- Whether the organization was a subsidiary or branch of another company;
- Whether the organization was a private business or tribally-owned organization (and not a public agency or not-for-profit organization);

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¹ 49 CFR Section 26.45 (c).

² CRI's work includes many tens of thousands of business interviews as part of BBC disparity studies for other state and

³ Other establishments could not be reached after multiple attempts (see Appendix C) or could not make a responsible staff member available to complete the interview.

⁴ BBC's analysis of these firms indicates that very few had performed work for ODOT.

- Qualifications and interest in transportation contracting work for state and local agencies;
- Qualifications and interest in work as a prime, a subcontractor or a supplier/trucker;
- Firm specialization;
- The largest contract or subcontract bid on or performed in the past five years;
- Ability to work in specific geographic regions of Oklahoma;
- How long the firm has been in business; and
- Race/ethnicity/gender of firm ownership.

Firm representatives were offered the option of answering questions that were e-mailed or faxed if they preferred not to complete an interview over the phone. (About 2 percent of interviews were completed through e-mail or fax.)

Consolidating responses from multi-location firms. In total, 1,084 individual organizations were successfully contacted and answered availability interview questions. Before analyzing responses, BBC identified 18 instances in which multiple local offices of the same firm completed interviews. Responses were combined for these nine multi-location firms. This step reduced the number of interviews completed with unique firms by nine, as shown in Figure IV-1.

Figure IV-1.
Screening of completed business telephone interviews for possible inclusion in the availability analysis

Source

BBC Research & Consulting from 2008/2009 Availability Survey.

	Number
Establishments successfully contacted	2,145
Less establishments not interested in discussing availability for ODOT work	1,061
Establishments that completed interviews about firm characteristics	1,084
Less:	
Multiple establishments	9
No road or highway-related work or not interested in work	335
Work outside of industry scope	11
Not a business	16
No past bid/award for state or local government work	154
No interest/qualifications in ODOT/local government work	17
Firms possibly available for ODOT work included in BBC analysis	542

Qualifications and interest, and firm specialization. Firms successfully contacted were asked a number of questions concerning types of work performed, past bidding and qualifications for and interest in ODOT and local government work. Appendix C includes one of the telephone interview instruments used in collecting these data.

⁵ BBC's methodology for combining responses, and following up with respondents when necessary, is described in Appendix C.

As described below, firms BBC included as potentially available for ODOT prime contracts or subcontracts were those reporting that they:

- a. Perform types of work relevant to ODOT contracts;
- b. Are a private sector or tribally-owned business;
- c. Have performed or bid on state or local government or private sector highway- or roadrelated contracts or subcontracts in the past five years; and
- d. Are qualified for and interested in work as a prime contractor or subcontractor for ODOT or local governments.

In addition, firms were asked about (e) their ability to work in specific regions of Oklahoma, (f) the largest contract they had bid on, and (g) the year the firm was established (so that BBC could avoid counting firms as available for contracts that predated a firm's establishment date).

a. Perform types of work relevant to ODOT contracts. The study team telephone interviewer initially confirmed with the business owner or manager that the firm does work or provides materials related to construction, maintenance or design of roads and highways. If the business owner or manager had any questions as to whether his or her firm fit this definition, the interviewer explained that the interviews were for firms performing any work related to "construction, maintenance or design, such as building and parking facilities, paving and concrete, tunnels, bridges and roads, [also including] design, engineering, planning, environmental assessment or related professional services." As shown in Figure IV-1, 335 interviews were discontinued because the firm owner or manager indicated that the firm was not involved in that type work or was uninterested in it.

Firms were also asked if they perform the following specific types of transportation-related work:

- Grading (including excavation, erosion control, right of way clearance and demolition);
- Drainage structures (including trenching and bedding of pipes, sanitary sewer construction, water lines and underground utility relocations);
- Paving and coldmilling (including asphalt, concrete pavement, pavement and bridge deck repair or surface removal);
- Bridge construction and repair (including bridge waterproofing and sealing, joints and redecking of bridge structures);
- Fencing, guardrail and barriers (including concrete barrier, bridge rail, standard highway fencing and noise barrier fences);
- Painting and striping (including permanent traffic control markings and painting services);
- Traffic control (including flagging, traffic control supervision and traffic control devices);
- Electrical, lighting and signals (including highway lighting and traffic signals); and
- Other types.

⁶ In response to questions from the firm manager or owner, the interviewer also offered that doing work includes having done work, trying to sell this work, or providing related materials.

BBC coded the specific answers that provided information on "other types" of work into corresponding subindustries. These firms were then deemed available for the types of transportation related contracting that corresponded to the coded answers.

Firms could respond that they perform only one type of work or multiple types of work. The interview also identified the firm's main line of business. For 11 firms, the primary line of business was outside the scope of the disparity study for 11 firms even though the firm indicated that they did perform work related to highway contracting. These firms were still included in the availability analysis for the types of work they perform related to highway contracting.

- **b. Private or tribally-owned business.** Most of the organizations contacted confirmed that they were a business (including one tribally-owned business). Sixteen establishments indicated that they were a public sector or not-for-profit organization and were therefore excluded from the availability analysis.
- c. Performed or bid highway- or road-related contracts or subcontracts in the past. The interviewer asked each firm owner or manager if the firm had bid on or submitted a price quote for any part of a state or local government project in the past five years (concerning construction, maintenance or design work related to roads and highways), or had been awarded any part of such a contract. The interview asked similar questions related to private sector work. In the interviews, 154 firms indicated that they had not bid on or been awarded a part of a contract related to roads and highways in the past five years.
- d. Qualified for and interested in work as a prime contractor or subcontractor for ODOT or local governments. In addition, firms were asked if they "were qualified and interested in working with the Oklahoma Department of Transportation or local governments." Separate questions probed qualifications and interest in working as a prime contractor (or prime consultant) and as a subcontractor/supplier (or subconsultant). Of the firms asked this pair of questions, 17 indicated that they were not qualified and interested in working with ODOT or local governments as a prime or a subcontractor/supplier. BBC included responses from these firms when analyzing marketplace conditions but not when calculating availability for ODOT contracts.

After screening for qualifications and interest, there were 542 firms remaining for analysis of availability out of the interviews completed with 1,084 business establishments (see Figure IV-1).

e. Ability to work in specific regions of Oklahoma. For each of the five regions of the state identified in Figure II-2, firm owners and managers were asked questions similar to the following:

"Could your company do work or serve customers in the Tulsa area and other parts of Northeast Oklahoma?"

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BBC included local government projects in this question as some ODOT projects also include local governments.

⁸ Included in the database of available firms were 26 companies that expressed qualifications and interest in working as a prime contractor and not as a subcontractor and 104 firms that expressed qualifications and interest in working as a subcontractor/supplier and not as a prime contractor.

No firms were excluded from the availability analysis based on lack of an answer to these questions. Firms giving no response were only counted as able to work on projects in the region in which they were physically located.

- **f. Largest contract on which they had bid or performed.** Firms were counted as available for ODOT work up to the maximum size of contracts and subcontracts on which they had bid or performed in Oklahoma within the prior five years (regardless of private or public sector). If no response to this question was received, the firm was counted as available for just the smallest contract elements (those up to \$100,000). One-hundred and eight firms did not answer at least one of these questions.
- **g. Year the firm was established.** Interviewers also confirmed when the firm was established. Firms were only counted as available for ODOT contracts that were awarded after they were in business. Ninety firms were operating for only a portion of the July 2004 through June 2009 utilization study period.⁹

C. Number of Minority-, Women- and Majority-owned Firms Included in the Availability Database

Of the 542 companies counted as possibly available for specific types of ODOT contracts, 153 (28%) were minority- or women-owned. Figure IV-2 provides race/ethnicity/gender information for these 542 companies.

Figure IV-2.
MBE/WBEs as a
percentage of firms
available for ODOT
transportation
contracts, by race,
ethnicity and gender

Source:

BBC Research & Consulting from 2008/2009 Availability Survey.

Race, ethnicity and gender	Number of firms	Percent of total
African American-owned	9	1.7 %
Asian-Pacific American-owned	2	0.4
Subcontinent Asian American-owne	ed 1	0.2
Hispanic American-owned	12	2.2
Native American-owned	66	12.2
Total MBE	90	16.6 %
WBE (white women-owned)	63	11.6
Total MBE/WBE	153	28.2 %
Total majority-owned firms	389	71.8
Total firms	542	100.0 %

The data in Figure IV-2 solely reflect a simple count of firms, with no analysis of availability for specific contract types. As such, it does not indicate relative availability of minority- and womenowned firms to perform ODOT work. To develop the measures of availability for the disparity analysis and base figure analysis, BBC conducted a sophisticated analysis of the relative number of MBEs and WBEs available for each ODOT prime contract and subcontract. Parts E and F of Section IV provide those results.

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⁹ Companies for which no establishment date was identified were counted as available for the full study period.

D. Definitions of MBE/WBEs, DBEs and Potential DBEs

BBC's discussion of terms and definitions used in the availability analysis pertains to the difference between minority- and women-owned firms and certified DBEs and how BBC coded firms owned by minority women.

Definitions. BBC's availability analysis uses the following definitions:

- "Minority- and women-owned firms" (MBE/WBEs) are firms that are owned and controlled by minorities or women, regardless of whether they are certified as DBEs or as MBE/WBEs. BBC follows the definitions of specific minority groups contained in 49 CFR Part 26. Most minority- and women-owned firms doing business in Oklahoma are not currently certified. The disparity analysis examines MBEs (by race/ethnicity) and WBEs as explained in further detail below.
- Disadvantaged business enterprises ("DBEs") are businesses that are certified as such (which means that they are certified as being below revenue and personal net worth limits included in 49 CFR Part 26). Because implementation of the Federal DBE Program requires ODOT to track DBE utilization, BBC reports certain utilization data for DBE-certified firms.
- Potential DBEs are minority- and women-owned firms that are certified or appear that they potentially could be certified as DBEs (regardless of actual DBE certification). These firms are considered for purposes of establishing a base figure for the overall annual aspirational DBE goal. Figure IV-3 provides additional information on the firms included as potential DBEs.

Analysis of potential DBEs when examining the base figure for the overall annual aspirational

DBE goal. ODOT must set an overall annual aspirational goal for DBE utilization, but many firms that could be certified as DBEs are not currently certified. Consistent with court-reviewed availability analyses in states such as Illinois and Minnesota, BBC analyzed the base figure for the overall DBE goal based primarily on relative availability of minority- and women-owned firms that are potential DBEs, not just those that are currently certified.

Figure IV-3. Definitions of potential DBEs

To formulate the overall annual DBE goal, BBC excluded firms that recently graduated from the DBE Program as well as high-revenue minority-and women-owned firms that are not currently DBE-certified. Firms that appeared that they could be potentially certified as DBEs based on ownership and revenue were counted in the overall goal. Construction-related firms with annual revenue of less than \$25 million and engineering-related firms with annual revenue of less than \$5 million were counted as potential DBEs. These sizes correspond to the categories Dun & Bradstreet uses to report revenue (which BBC used to develop revenue size ranges in the availability interviews).

The \$5 million revenue limit for engineering-related firms closely matches the SBA small business size standard for these firms (\$4.5 million). The \$25 million revenue limit is below the SBA size standard for what constitutes a small business that performs highway, street and bridge construction (\$33.5 million) because of the overall revenue limit established in USDOT guidelines (\$22,410,000 average over three years).

Firm owners must also meet USDOT personal net worth limits. Personal net worth of the owners of available firms was not available as part of this study and thus was not considered when determining potential DBE status.

¹⁰ Of the 542 MBE/WBE firms included in the availability database, 32, or about 6 percent, had DBE certification.

Although USDOT allows state and local agencies to develop overall annual aspirational goals for DBE participation by counting the number of available firms in DBE directories and dividing by total firms available in the local marketplace, its "Tips for Goal-Setting in the Disadvantaged Business Enterprise Program" identifies the concern that a DBE directory may undercount potential DBEs in a local market area. ¹¹ USDOT recommends that agencies consider going beyond the directory of certified DBEs to include minority- and women-owned firms that may be available for agency contracting. "Tips for Goal-Setting" states that firms potentially certified as DBEs be included in the base figure analysis (see Section II of "Tips for Goal-Setting"). BBC's approach to setting the base figure is also consistent with methods approved in *Sherbrooke Turf* ¹² and in *Northern Contracting*, which favorably refers to and cites "Tips for Goal-Setting." (See Appendix A of this report for a discussion of these and other legal cases.)

When considering minority- and women-owned firms that are not currently DBE certified in the base figure for the overall annual aspirational goal, BBC excludes firms that have grown too large for the DBE Program or otherwise been denied DBE certification. BBC also excludes MBEs and WBEs with revenue that would place them near the revenue ceiling for DBE certification. These steps are consistent with USDOT's instructions in Part G of "Tips for Goals Setting."

Summary. Figure IV-4 summarizes how different types of minority- and women-owned firms are counted when (a) determining MBE/WBE availability for purposes of disparity analyses and (b) calculating the base figure for the overall annual DBE goal.

Figure IV-4.
Summary of how firms are counted in different availability analyses

Type of firm	a. MBE/WBEs for disparity analysis	b. Potential DBEs for base figure analysis
Firms currently DBE-certified	Counted as MBE/WBE if minority- or women-owned	Counted as potential DBE
MBE/WBEs that are below revenue ceiling for DBS certification	Counted as MBE/WBE	Counted as potential DBE
MBE/WBEs that have graduated from DBE program	Counted as MBE/WBE	Not counted as potential DBE
MBE/WBEs that appear to have revenue too large to be DBE-certified	Counted as MBE/WBE	Not counted as potential DBE

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¹¹ USDOT Tips for Goals Setting in the Disadvantaged Business Enterprise Program. http://www.osdbu.dot.gov/DBEProgram/tips.cfm.

¹² Sherbrooke Turf, Inc. v. Minnesota DOT, and Gross Seed Company v. Nebraska Department of Road, 345 F.3d 964 (8th Cir. 2003), cert. denied, 541 U.S. 1041 (2004)

¹³ Northern Contracting, Inc. v. Illinois, 473 F.3d 715 at 723 (7th Cir. 2007).

E. Calculation of MBE/WBE Availability as Inputs to the Disparity Analysis

One of the uses of availability information for minority- and women-owned firms is as an input to the disparity analysis in this study.

Purpose. Availability of MBEs and WBEs is expressed in terms of the percentage of contract dollars that might be expected to go to MBE/WBEs given the relative availability of minority- and womenowned firms for the specific types, sizes and locations of a particular set of contracts and subcontracts. Availability establishes a "benchmark" for comparing the actual share of contract and subcontract dollars going to minority- and women-owned firms. (The availability analysis counts firms as MBEs — by race/ethnicity — and WBEs regardless of whether they are or could be certified as DBEs.)

The availability database for the ODOT disparity study included 542 businesses, but only a subset of those firms were included as potentially available for a particular ODOT prime contract or subcontract. BBC examined the characteristics of the specific prime contract or subcontract, including type of work involved, contract size and date, and then identified firms in the availability database that performed that type of work, role and size of contract — a "bottom-up" approach to determining availability that is explained in detail on the following page.

Steps to calculating availability. When calculating relative MBE/WBE availability, BBC examined more than 7,900 ODOT contract elements and the availability of minority- and womenowned firms associated with each element. To be counted as available for an individual ODOT contract or subcontract, firms must have reported that they perform the type, size and contract role related to the work on that contract element:

- 1. For each ODOT contract element (prime contract, subcontract, etc.), BBC determined the type of work, contract role and size of the work.
- 2. BBC then identified firms in the availability database that reported they:
 - Are qualified and interested in performing that role (prime or subcontractor) for the specific type of work for public agencies;
 - ➤ Have bid on or performed work of that size;
 - Are available to work in the region in which the project was located; and
 - ➤ Were in business in the year the contract was awarded.
- 3. BBC counted the relative number of minority- and women-owned firms among all firms available for that specific type of work (e.g., three white woman-owned firms and one African American-owned firm, and 16 majority-owned firms out of 20 firms available to perform that contract element).
- 4. The study team then translated the numeric availability of firms for a contract element into percentage availability for the contract element (For example, if WBEs were 3/20ths of available firms, availability of WBEs for this work would be 15 percent.).

- 5. BBC weighted the relative availability for each prime contract and subcontract by the dollars of work corresponding to each contract element.
 - ➤ BBC multiplied percentage availability for each group by the dollars associated with each ODOT contract element;
 - Added the results across contract elements; and
 - Divided by total dollars for all ODOT contract elements to produce a dollarweighted estimate of overall availability for MBE/WBEs and for each MBE/WBE group.

The process summarized above was used for both the base figure analysis and to determine relative MBE/WBE availability for a particular set of contracts or subcontracts examined in the disparity analysis.

Figure IV-5 reports dollar-weighted availability by MBE/WBE group for ODOT FHWA-funded contracts for July 2004–June 2009 (including related subcontracts). About 12.7 percent of combined prime and subcontract dollars on these contracts would be expected to go to MBE/WBEs. White women-owned firms (availability of 7%) and Native American-owned firms (availability of 4%) account for much of this availability.

Figure IV-5.
Availability of firms for
ODOT FHWA-funded
transportation contracts,
July 2004—June 2009, by
race, ethnicity and
gender

Note: See Figures: K-6, K-9 and K-3. BBC Research & Consulting from 2008/2009 Availability Survey.

	Utilization benchmark (availability %)		
Race, ethnicity and gender	Construction	Engineering	Total
African American-owned	0.3 %	0.9 %	0.4 %
Asian-Pacific American-owned	0.0	3.9	0.2
Subcontinent Asian American-owned	0.0	2.5	0.1
Hispanic American-owned	0.9	1.7	0.9
Native American-owned	4.0	7.0	4.1
WBE (white women-owned)	<u>7.2</u>	3.1	7.0
Total MBE/WBE	12.4 %	19.1 %	12.7 %

Unique availability benchmark for each set of contracts. BBC separately determined dollar-weighted availability by racial/ethnic/gender group for each set of ODOT contracts and subcontracts examined in the disparity analysis. A number of tables in Appendix K report MBE/WBE availability and disparity analysis results for subsets of ODOT contracts and subcontracts. Overall MBE/WBE availability varies from 8 percent to about 25 percent depending upon the types and sizes of work examined. In general:

- Dollar-weighted MBE/WBE availability is greater for small ODOT prime contracts and subcontracts compared with large contract elements.
- MBE/WBE availability is greater for subcontracts than for ODOT prime contracts.

The 12.7 percent availability for all MBE/WBEs for FHWA-funded contracts is higher than the level BBC suggests as the base figure for the Authority's overall annual aspirational goal. BBC's calculation of MBE/WBE availability counts as MBE/WBEs two groups of minority- and women-owned firms not counted as potential DBEs in the base figure: (a) businesses that have grown to be too large for the Federal DBE Program, and (b) firms that are currently not DBE-certified and are likely to be too large to meet certification requirements.

Why disparity analysis for MBE/WBEs, not DBEs. Analysis of utilization and availability of minority- and women-owned firms (by race/ethnicity/gender) allows one to analyze whether there are disparities affecting minority- and women-owned firms. In other words, the possibility that race or gender discrimination affects utilization of firms is analyzed by comparing outcomes for firms based on the race/ethnicity/gender of their ownership, not certification status. Firms may be discriminated against because of the race or gender of the business owner regardless of whether that owner has applied for DBE certification.

Furthermore, analysis of whether firms face disadvantages based on the race/ethnicity/gender of the firm owner counts the most successful, highest-revenue minority- and women-owned firms in the statistics for all minority- and women-owned firms. A disparity analysis focusing on DBEs would improperly compare outcomes for certified DBEs (by definition, "economically disadvantaged" minority- and women-owned firms) with all other firms (combining majority-owned firms with very successful firms owned by minorities and women). One might find disparities for any group of firms for which membership is limited to low-revenue firms.¹⁴

Finally, 49 CFR Part 26 allows certification of white male-owned firms as DBEs. Disparity analysis based on DBEs is not purely an analysis of disparities by race/ethnicity and gender.

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¹⁴ An analogous situation concerns analysis of possible wage discrimination. A disparity analysis that would compare wages of minority employees to wages of all employees should include both low- and high-wage minorities in the statistics for minority employees. If the analysis removed high-wage minorities from the statistics for minorities, any comparison of wages between minorities and non-minorities would likely show disparities in wage levels.

Coding of minority women-owned firms. In the disparity study, BBC combines firms owned by minority women and firms owned by minority men into "minority-owned firms." "WBEs" are firms owned by white women. BBC's rationale is discussed in Figure IV-6.

Figure IV-6. Coding of firms owned by minority women

Firms owned by minority women present a challenge in coding for purposes of both the availability analysis and the utilization analysis. BBC considered four options for coding and analysis of firms owned by minority women:

- a. Coding these firms as both minority- and women-owned;
- b. Creating a unique group of minority female-owned firms;
- c. Grouping minority female-owned firms with all women-owned firms; and
- d. Grouping minority female-owned firms with the relevant racial/ethnic group.

BBC chose not to code the firms as both women-owned and minority-owned to avoid potential double-counting when reporting total MBE/WBE utilization and availability. Dividing each racial/ethnic group into firms owned by men versus women (e.g., African American male-owned firms, African American female-owned firms, etc.) was also unworkable for purposes of the disparity analysis because some minority groups had utilization and availability so low, even when combining men and women, that further disaggregation made it more difficult to interpret results.

After rejecting the first two options, BBC then considered whether to group minority female-owned firms with the relevant minority group or with all women-owned firms. BBC chose the former — to group African American women-owned firms with all African American-owned firms, etc. "WBE" in this report refers to white women-owned firms. Evidence of discrimination against white women-owned firms should be considered evidence of discrimination against women of any race or gender. This definition of WBEs also gives ODOT information to answer questions that often arise pertaining to utilization of white women-owned firms, such as whether a disproportionate share of work goes to firms owned by white women.

F. Base Figure for Overall Goal for DBE Participation in FHWA-funded Contracts

Establishing the base figure is the first step in calculating an overall annual goal for DBE participation in ODOT FHWA-funded contracts. BBC calculated the base figure using information on currently-certified DBEs and minority- and women-owned firms that potentially could be DBE-certified (see previous explanation in Section IV).

As with the calculation of MBE/WBE availability for purposes of the disparity analysis, BBC did not include in the availability analysis expenditures that went to non-businesses or are otherwise outside the scope of typical ODOT construction, engineering and related professional services. Because government agencies, associations and not-for-profit agencies are neither DBE- nor non-DBE-owned, associated FHWA-funded contracts are not included in the calculations concerning the overall annual aspirational goal. BBC did consider tribally-owned businesses in the availability analysis, however.

Base figure. BBC's availability analysis indicates that minority- and women-owned firms currently or potentially certified as DBEs would receive 9.3 percent of prime contract and subcontract dollars for ODOT FHWA-funded transportation contracts if they had the same opportunities as similarly situated majority-owned firms.

ODOT should consider 9.3 percent as the base figure for its overall annual aspirational goal for DBE participation if the distribution of FHWA-funded contracts for the time period covered by the goal is expected to be similar to FHWA-funded contracts from July 2004 through June 2009.¹⁵

Figure IV-7 presents the components of the base figure for the overall annual DBE goal by group of potential DBEs. The base figure reflects a weight of 95 percent for construction and 5 percent for engineering.

Figure IV-7.
Potential DBEs as a percentage of firms available for ODOT FHWA-funded transportation contracts, by race, ethnicity and gender

Includes certified DBEs and minority- and women-owned firms potentially certified as DBEs. Total reflects a weight of 95% for construction and 5% for engineering, reflecting FHWA-funded dollars of contracts for July 2004–June 2009.

Source:

BBC Research & Consulting.

	Utilization benchmark (availability %)		
Potential DBEs	Construction	Engineering	Total
African American-owned	0.3 %	0.9 %	0.4 %
Asian-Pacific American-owned	0.0	3.9	0.2
Subcontinent Asian American-owned	0.0	0.0	0.0
Hispanic American-owned	0.7	1.4	0.7
Native American-owned	4.0	7.0	4.1
WBE (white women-owned)	4.0	3.1	3.9
Total potential DBEs	9.0 %	1 6.2 %	9.3 %
Sector weight	95 %	5 %	

The base figure presented in Figure IV-7 is similar to the 8 to 9 percent range of ODOT goals for DBE participation it has set since 2004.

Additional steps before determining the overall annual DBE goal. ODOT must consider whether to make a "step 2" adjustment to the base figure before determining a final overall annual DBE goal. The step 2 adjustment can be upward or downward. Section VIII of the report presents information ODOT should consider in choosing whether to make such an adjustment.

G. Implications for any DBE Contract Goals

As noted in Section X, if ODOT chooses to utilize DBE contract goals in the future, ODOT should:

- Continue to set goals on a contract-by-contract basis given the unique attributes of a contract.
- Continue to only set DBE contract goals on FHWA-funded contracts that have subcontracting opportunities.
- Use information in the availability database developed through this study as a starting point for establishing contract goals.

¹⁵ Construction contracts constituted 95% of the FHWA-funded contract dollars in the study period and engineering and related professional services contracts represented 5% of FHWA-funded contract dollars.

- For each major subcontracting discipline, examine the sizes and disciplines of expected subcontracts for the project.
- Examine the availability database to determine number of potential and currently-certified DBEs that can perform the work (including factors such as type of work, subcontract size and location).

H. Other Approaches Examined

BBC explored other approaches to developing a database of firms available for ODOT contracts before deciding to use information collected through interviews of local businesses. For example, ODOT prequalifies certain construction prime contractors and collects some information on potential bidders. Both sets of data were considered for use in the availability analysis, as discussed below.

Why not use ODOT's pre-qualification and bidders lists to determine availability? BBC evaluated use of the ODOT prequalification list for construction prime contracts and the ODOT bidders list for engineering-related contracts in analyzing availability for ODOT work.

Prequalification for construction prime contracts. ODOT requires firms bidding on certain types of construction work as prime contractors to successfully go through its process for pre-qualifying contractors. Contractors must identify types of work for which they are seeking pre-qualification plus supporting information that demonstrates the ability to perform that work (which ODOT reviews). Contractors also submit balance sheet information, which ODOT uses to calculate the maximum size of ODOT contract they are allowed to bid. Contractors that have successfully won and performed a certain amount of ODOT contracts have the bid size restriction removed. ODOT also reports that it is flexible in "qualifying" firms for work categories.

BBC chose not to use the ODOT prequalification list as the list of firms available for ODOT prime contracts:

- The prequalification requirement is an ODOT-created process. Many Oklahoma local governments and many other state DOTs do not have prequalification requirements for the same types of work. Oklahoma firms can and do bid on and perform work for private sector and other public sector organizations without being prequalified. ¹⁶
- Certain elements of the prequalification process favor firms that have been successful in winning ODOT work, which raises further questions as to its suitability as an independent benchmark for evaluating MBE/WBE utilization (see Section VII).
- Certain types of ODOT prime contracts do not require prequalification, and firms need no prequalification to work as subcontractors.
- ODOT prequalification is relatively fluid, with firms able to apply for new work categories and update information as conditions change.
- By its nature, the prequalification process is somewhat subjective.

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Ninety percent of the firms responding to availability interviews that reported that they have bid on or have been awarded public sector prime contracts were not currently on the ODOT prequalification list.

Because BBC already considers sizes of contracts a firm has bid on as a prime contractor in the availability analysis (as described further in this section), it is not necessary for BBC to utilize ODOT prequalification information to capture the fact that firms bid on different sizes of projects. Further, the specific types of work for which firms prequalify are not especially instructive, as it is relatively easy to become prequalified in a number of different fields.

Based on the above information, BBC determined that ODOT prequalification should be examined as an ODOT-created step in the procurement process rather than as a requirement for the firm to be considered available for ODOT construction prime contracts. Section VII presents BBC's analysis of whether the current ODOT prequalification process is a potential barrier to new firms, small businesses and/or minority- and women-owned firms seeking to obtain ODOT construction work as a prime contractor.

"Bidders' list" for professional services contracts. ODOT provides a downloadable information form that engineering-related firms can fill out to receive notifications of solicitations. Because solicitation notices are also posted on the website, and private bid listing services can notify firms as well, there are other ways that potential bidders learn of ODOT professional services contracts. Firms do not need to fill out the information form to be eligible to bid. For these reasons, BBC did not determine availability of firms for ODOT engineering-related contracts from the ODOT professional services bidders list.

Strengths of BBC's enhanced "custom census" approach. Some of the relative strengths of a custom census approach as used in ODOT's disparity study are summarized in Figure IV-8. It is worthwhile to summarize certain strengths in how BBC examined specific factors for determining whether a firm was available for a particular contract element.

Specialization of work. USDOT suggests considering the availability of firms based on their ability to perform specific types of work. The example USDOT gives in "Tips for Goal-Setting in the Disadvantaged Business Enterprise (DBE) Program" is as follows: If 90 percent of an agency's contracting dollars is spent on heavy construction and 10 percent on trucking, the agency would calculate the percentage of heavy construction firms that are MBEs or WBEs and the percentage of trucking firms that are MBEs or WBEs, and weight the first figure by 90 percent and the second figure by 10 percent when calculating overall MBE/WBE availability. BBC examines 15+ different areas of specialization ("subindustries") in the ODOT disparity study.

Figure IV-8. Summary of the strengths of a "custom census" approach

Federal courts have reviewed and upheld "custom census" approaches to availability that begin with D&B data. The study team's methodology for analyzing MBE/WBE availability took the previous court-reviewed custom census approach as a starting point and added several layers of additional screening when determining firms available for transportation contracting work.

For example, the BBC analysis includes discussions with individual firms about interest in state and local government work, contract role and geographic location of their work, items not included in the court-reviewed availability analyses. BBC also analyzes the sizes of contracts and subcontracts that firms have performed or bid on in the past.

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¹⁷ Tips for Goals Setting in the Disadvantaged Business Enterprise (DBE) Program, http://osdbu.dot.gov/?TabId=133.

Qualifications and interest in prime contractor and subcontractor work. Although not a requirement in the Federal DBE Program (and not done by the Illinois Department of Transportation in the information reviewed by the Seventh Circuit in *Northern Contracting*), BBC collected information on whether firms reported qualifications and interest in working as a *prime contractor* and as a *subcontractor*. In BBC's availability analysis, only firms qualified and interested in prime contracts are counted as available for prime contracts. Firms reporting qualifications and interest in subcontracts are counted as available for these contract components. Some firms reported qualifications and interest in both contract roles, and are counted as available for either role.

Size of contract or subcontract element. In counting available firms, BBC also considered whether a firm had previously worked or bid on a project of equivalent size (in dollars) to the specified contract or subcontract element. BBC's approach is consistent with guidance from the U.S. Court of Appeals for the Federal Circuit regarding capacity of firms to perform different sizes of contracts (see *Rothe Development Corp. v. Department of Defense*). 18

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¹⁸ Rothe Development Corp. v. U.S. Department of Defense, 545 F.3d 1023 (Fed. Cir. 2008).

SECTION V. ODOT Utilization of Minority- and Women-owned Firms

In Section V, BBC examines participation of minority- and women-owned firms in ODOT contracts. The disparity analyses that follow in Section VI compare the utilization results from Section V with the availability analyses introduced in Section IV.

Results concerning MBE/WBE and DBE utilization are important for reasons beyond the disparity analysis. State legislators and others have also expressed interest in an accurate, independent picture of ODOT utilization of minority- and women-owned firms, especially for engineering-related contracts. In addition, USDOT suggests that agencies examine utilization for contracts without DBE contract goals when designing their future implementation of the Federal DBE Program. ¹

ODOT did not set any DBE goals on its state-

funded contracts during the July 2004–June 2009 study period, nor did it apply any other race- or gender-based programs for these contracts. During this time, ODOT only operated a DBE contract goals program for its FHWA-funded construction contracts. The Department began setting DBE contract goals on certain engineering and other professional contracts after the end of the study period.

Section V is organized in four parts:

- A. Overview of the utilization analysis;
- B. MBE/WBE and DBE utilization in ODOT transportation contracts;
- C. MBE/WBE and DBE utilization in ODOT construction contracts; and
- D. MBE/WBE and DBE utilization in ODOT engineering-related contracts.

1.http://www.dotcr.ost.dot.gov/Documents/Dbe/49CFRPART26.doc.

Figure V-1. Defining and measuring "utilization"

"Utilization" of minority- and women-owned firms refers to the share of contract dollars going to these MBEs and WBEs. BBC reports results for both certified DBEs (firms certified as disadvantaged business enterprises in the year of the specific contract) and for all minority- and women-owned firms. BBC also examines results by race/ethnic/gender group.

Utilization is expressed as a percentage of prime contract and subcontract dollars. ("Prime contract dollars" are total contract dollars less the money identified as going to subcontractors.) For example, WBE utilization of 5 percent means that 5 percent of the contract dollars examined went to women-owned firms. Expressed another way, 5 cents of every contract dollar went to WBEs.

Information concerning utilization of minority- and women-owned firms is useful on its own, but is even more instructive when compared with a benchmark for the level of utilization expected given relative availability of minority- and women-owned firms for a particular set of contracts. BBC introduces this "disparity analysis" in the next section of the report (see Section VI).

A. Overview of the Utilization Analysis

BBC examined utilization of minority- and women-owned firms as prime contractors and subcontractors in ODOT transportation contracts from July 2004 through June 2009.

Definition of utilization. As outlined in Figure V-1, "utilization" of minority- and women-owned firms refers to the percentage of contract dollars going to MBE/WBEs. If MBE/WBEs were awarded \$10 million in prime contracts and subcontracts out of a total of \$100 million in contract dollars, MBE/WBE utilization would be 10 percent.

Differences between ODOT and BBC utilization analyses. BBC's analysis of MBE/WBE utilization goes beyond what ODOT currently reports to the USDOT, as explained below.

BBC identified minority- and women-owned businesses in addition to firms certified as DBEs. Because USDOT regulations require state and local agencies to report participation of DBEs on FHWA-funded contracts, ODOT's utilization reports to FHWA focus on DBEs. ODOT does not track utilization of other firms owned by minorities and women.

In addition to counting certified DBEs in the utilization statistics, BBC examined minority- and women-owned firms that may have once been DBE-certified and graduated (or let their certifications lapse), and MBE/WBEs that have never been DBE-certified. BBC identified race/gender ownership through:

- ODOT DBE certification records;
- City of Tulsa MBE/WBE Directory;
- U.S. Small Business Administration 8(a) certification directory;
- Study team telephone interviews with owners and managers of utilized firms (the study team attempted to reach each utilized firm via phone, fax or e-mail); and
- ODOT staff review.

BBC also examined utilization for firms certified as DBEs. Although a firm owned by a socially and economically disadvantaged white man has received DBE certification from ODOT, BBC identified no DBE certified as a white male-owned firm receiving an ODOT prime contract or subcontract during the study period. Therefore, Section V results for DBE participation in ODOT contracts are a subset of overall MBE/WBE utilization — all DBE firms in the data are minority- or women-owned.

BBC had more comprehensive data on engineering subcontracts. Utilization reports that ODOT submitted to FHWA contained information on DBE subcontractors for FHWA-funded construction contracts but not for engineering-related contracts. During the study period, ODOT did not compile complete information on DBE subconsultants on engineering contracts. As discussed in Section II and Appendix B, these data had to be compiled as part of the disparity study effort.

The disparity study also examined state-funded contracts. ODOT's DBE utilization reports are for FHWA-funded contracts, not state-funded contracts (contracts solely funded through non-USDOT sources). In addition to analyzing FHWA-funded contracts, BBC examined MBE/WBE and DBE participation in ODOT's state-funded contracts.

B. MBE/WBE and DBE Utilization in ODOT Transportation Contracts

The following figures present MBE/WBE and DBE utilization as a percentage of ODOT contract dollars. Utilization in these figures includes prime- and subcontractor participation.²

Each figure separately reports results for ODOT's FHWA- and state-funded transportation contracts. The figures also show aggregate results across all FHWA- and state-funded contracts.

Figure V-2 combines results for construction and engineering contracts.

- Each bar in the graph indicates the percentage of overall contract dollars going to minority- and women-owned firms (the statistic shown on the top of the bar), including the share going to certified DBEs.
- The dark shading in the bottom portion of the bar presents the share of overall contract dollars going to DBEs alone.
- The difference between DBE utilization and total MBE/WBE utilization corresponds to the participation of MBE/WBEs that were not certified as DBEs.

Figure V-2.
MBE/WBE and DBE share of prime contract/subcontract dollars for ODOT construction and engineering contracts, July 2004—June 2009, FHWA vs. state funding

Note:

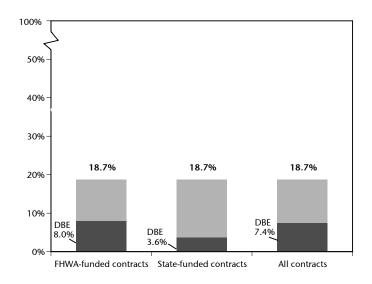
Certified DBE utilization.

Number of contracts/subcontracts analyzed is 6,306 for FHWA-funded contracts, 1,685 for state-funded contracts and 7,991 for all contracts.

For more detail and results by group, see Figures K-3, K-4 and K-2 in Appendix K.

Source

BBC Research & Consulting from data on ODOT contracts.



FHWA-funded contracts. BBC examined 1,542 ODOT FHWA-funded transportation construction and engineering contracts from July 2004 through June 2009. BBC was able to obtain data for 4,764 subcontracts associated with these contracts. In total, BBC identified \$2.9 billion for these 6,306 contract elements.

Minority- and women-owned firms obtained 18.7 percent of the dollars of FHWA-funded contracts from July 2004 through June 2009, as presented in Figure V-2. DBE utilization for these contracts was 8 percent.³

BBC RESEARCH & CONSULTING

² When calculating prime contractor utilization, BBC counts dollars retained by the prime contractor (total dollars less subcontract dollars for the contract). In this way, addition of prime contractor and subcontractor utilization for a contract equals the contract amount.

³ By comparison, ODOT utilization reports for FFY 2004–FFY 2009 showed DBE participation to be 8.6 percent of FHWA-funded contracts. ODOT examined \$ 3.1 billion in FHWA contracts for this time period.

State-funded contracts. BBC analyzed 603 ODOT state-funded contracts, which included 1,082 subcontracts. State-funded contracts for July 2004–June 2009 totaled \$453 million. MBE/WBEs (including DBEs) received the same percentage of total state-funded contract dollars — 18.7 percent — as for FHWA-funded contracts. The share of contract dollars going to DBEs was 3.6 percent.

Combined contracts. Of the \$3.3 billion in combined FHWA- and state-funded contract dollars examined for July 2004–June 2009, MBE/WBEs received \$618 million, or 18.7 percent. DBEs accounted for 7.4 percentage points (\$243 million) of the overall MBE/WBE participation.

Utilization by MBE/WBE group. Figure V-3 details utilization for minority- and women-owned firms (top half of the figure) and for just DBEs (bottom half of the figure) by specific racial/ethnic/gender groups. As noted previously, DBE utilization is a subset of total MBE/WBE utilization.

Native American- and white women-owned firms accounted for nearly all of the MBE/WBE utilization in ODOT contracts. ⁴ Native American-owned firms received 4.9 percent of FHWA – funded contract dollars and 9.5 percent of state-funded contract dollars, for a total of 5.5 percent of combined FHWA- and state-funded transportation contract dollars. White women-owned firms obtained 12.1 percent of combined contract dollars (12.6 % of FHWA-funded and 8.9 % of state-funded contract dollars).

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⁴ WBE refers to white women-owned firms in the utilization analysis to match the use of WBE in the availability analysis, as discussed in Section IV.

Figure V-3.

MBE/WBE and DBE share of prime/subcontract dollars for ODOT construction and engineering contracts, by race/ethnicity/gender, July 2004–June 2009 (thousands)

	FHWA-funded contracts		State-funded contracts		Total	
_	\$ in thousands	Percent	\$ in thousands	Percent	\$ in thousands	Percent
MBE/WBEs						
African American-owned	\$3,440	0.1 %	\$28	0.0 %	\$3,468	0.1 %
Asian-Pacific American-owned	423	0.0	0	0.0	423	0.0
Subcontinent Asian American-owned	648	0.0	53	0.0	701	0.0
Hispanic American-owned	28,845	1.0	1,181	0.3	30,026	0.9
Native American-owned	139,285	4.9	43,088	9.5	182,373	5.5
WBE (white women-owned)	360,430	12.6	40,098	8.9	400,528	12.1
Total MBE/WBE	\$533,072	18.7 %	\$84,448	18.7 %	\$617,520	18.7
Majority-owned	2,318,022	81.3	386,266	81.3	2,686,288	81.3
Total	\$2,851,094	100.0 %	\$452,714	100.0 %	\$3,303,808	100.0
DBEs						
African American-owned	\$3,140	0.1 %	\$28	0.0 %	\$3,168	0.1 9
Asian-Pacific American-owned	0	0.0	0	0.0	0	0.0
Subcontinent Asian American-owned	319	0.0	47	0.0	366	0.0
Hispanic American-owned	28,126	1.0	404	0.1	28,530	0.9
Native American-owned	83,120	2.9	8,143	1.8	91,263	2.8
WBE (white women-owned)	112,385	3.9	7,497	1.7	119,883	3.6
White male-owned DBE	0	0.0	0	0.0	0	0.0
Total DBE	\$227,091	8.0 %	\$16,119	3.6 %	\$243,210	7.4
Non-DBE	2,624,003	92.0	436,595	96.4	3,060,598	92.6
Total	\$2,851,094	100.0 %	\$452,714	100.0 %	\$3,303,808	100.0 9

Note: Numbers rounded to nearest tenth of 1 percent. Numbers may not add to totals due to rounding.

Number of contracts/subcontracts analyzed is 6,306 for FHWA-funded contracts, 1,685 for state-funded contracts and 7,991 for all contracts.

For more detail and dollars by group, see Figures K-3, K-4 and K-2 in Appendix K.

Source: BBC Research & Consulting from data on ODOT contracts.

C. MBE/WBE and DBE Utilization in ODOT Construction Contracts

Figure V-4 presents MBE/WBE and DBE participation in ODOT FHWA- and state-funded transportation construction contracts.

FHWA-funded contracts. From July 2004 through June 2009, ODOT awarded 1,230 FHWA-funded construction contracts for \$2.7 billion that were within the scope of the disparity study. BBC examined 4,511 subcontracts associated with these contracts. MBEs and WBEs obtained 19.5 percent of FHWA-funded construction contract dollars for July 2004–June 2009. Native Americanand white women-owned firms accounted for most of the MBE/WBE utilization. DBE utilization for these contracts was 8.3 percent. Figure K-6 in Appendix K provides additional information concerning MBE/WBE/DBE utilization for these contracts.

State-funded contracts. There were 529 ODOT state-funded construction contracts from July 2004–July 2009 included in the utilization analysis. These contracts totaled \$417 million. MBE/WBEs received 19.8 percent of state-funded construction contract dollars. DBE participation was 3.7 percent. (No DBE contract goals applied to these contracts.) Figure K-7 in Appendix K provides additional information concerning MBE/WBE and DBE utilization for these contracts.

Combined contracts. Combining FHWA- and state-funded construction, MBE/WBE participation was 19.5 percent (7.7% DBE utilization). Utilization by racial/ethnic/gender group can be found in Figure K-5.

Figure V-4.
MBE/WBE and DBE share of prime contract/subcontract dollars for ODOT construction contracts
July 2004—June 2009, FHWA vs. state funding

Note:

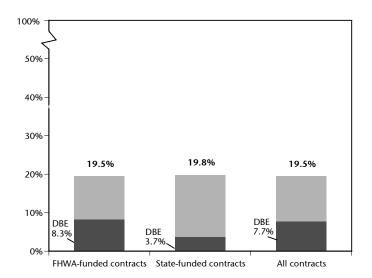
Certified DBE utilization.

Number of contracts/subcontracts analyzed is 5,741 for FHWA-funded contracts, 1,552 for state-funded contracts and 7,293 for all contracts.

For more detail and results by group, see Figures K-6, K-7 and K-5 in Appendix K.

Source:

BBC Research & Consulting from data on ODOT contracts.



D. MBE/WBE and DBE Utilization in ODOT Engineering-related Contracts

Figure V-5 presents information for ODOT engineering and related professional services contracts. As with previous figures in Section V, MBE/WBE and DBE participation results in Figure V-5 include prime— and subcontractor participation. Note that ODOT did not apply DBE contract goals to its FHWA- or state-funded engineering-related contracts during the study period.

FHWA-funded contracts. BBC examined 316 FHWA-funded engineering-related contracts (\$142 million) and was able to compile information for 253 related subcontracts. MBEs and WBEs obtained 4.0 percent of FHWA-funded engineering contract dollars for July 2004–June 2009. DBE utilization for these contracts was 1.6 percent.

State-funded contracts. BBC analyzed 74 state-funded engineering-related contracts for July 2004–July 2009. These contracts totaled \$35.6 million. MBE/WBE participation was 5.0 percent of total contract dollars (2.1 percent DBE participation).

Combined contracts. Of the \$177 million in combined FHWA- and state-funded engineering contracts, MBE/WBEs utilization was \$7.4 million, or 4.2 percent of contract dollars (1.7% DBE participation).

Figure V-5.
MBE/WBE and DBE share of prime contract/subcontract dollars for ODOT engineering and related professional services contracts July 2004—June 2009, FHWA vs. state funding

Note:

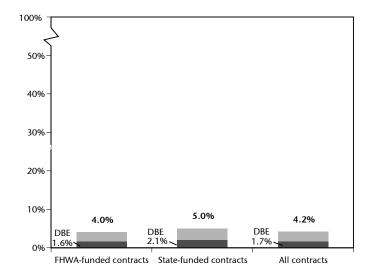
Certified DBE utilization.

Number of contracts/subcontracts analyzed is 565 for FHWA-funded contracts, 133 for state-funded contracts and 698 for all contracts.

For more detail and results by group, see Figures K-9, K-10 and K-8 in Appendix K. $\,$

Source:

BBC Research & Consulting from data on ODOT contracts.



SECTION VI. Disparity Analysis for ODOT Contracts

Section V reported low levels of utilization on ODOT contracts for some MBE/WBE groups. In addition, overall MBE/WBE participation in ODOT engineering-related contracts was substantially lower than in ODOT construction contracts.

However, utilization results for construction and engineering projects may not be directly comparable due to differences in the location, types and sizes of these contracts. When evaluating differences in utilization among racial/ethnic/gender groups or differences between sets of contracts, it is important to account for the relative availability of minority- and women-owned firms for the specific prime contracts and subcontracts under scrutiny.

To know whether groups of MBE/WBE firms are "underutilized," one must compare utilization with a benchmark that reflects what would be expected given the relative availability of firms for a particular set of contracting opportunities. This analysis is referred to as a disparity analysis. A disparity analysis helps to identify whether disparities exist for certain types of contracts and subcontracts for specific race/ethnicity/gender groups.

- The disparity analysis provided in Section VI accounts for differences in types, sizes, locations and timing of prime contracts and subcontracts to establish availability benchmarks for specific MBE/WBE groups and sets of contracts.
- BBC compares actual participation of an MBE/WBE group in certain contracts (expressed as a percentage of total dollars) to the percentage of work that might be expected to go to that group given availability for that specific work (i.e., availability benchmark).
- BBC creates an index that easily communicates how close actual utilization comes to the availability benchmark, or whether it exceeds the benchmark. By creating this index of relative disparity (or lack of disparity) for each MBE/WBE group and set of contracts, one can directly compare results among groups and between sets of contracts.

Section VI presents BBC's disparity analysis in six parts:

- A. Overview of disparity analysis methodology;
- B. Overall disparity results for ODOT contracts;
- C. Disparity results for construction contracts;
- D. Disparity results for engineering contracts;
- E. Analysis of statistical significance of disparities; and
- F. Summary of disparity results.

A. Overview of Disparity Analysis Methodology

BBC compared actual utilization of minority- and women-owned firms by race/ethnicity/gender (as a percentage of contract dollars) to the share of contract dollars that might be expected to go to minority- and women-owned firms based on BBC's availability analysis for a particular set of contracts. In the following discussion, "expected share of contract dollars" is also referred to as the "availability benchmark" for an MBE/WBE group for the specific set of contracts. For each MBE/WBE group, BBC calculated a unique availability benchmark for each set of ODOT contracts.

Both actual utilization and the availability benchmark for a set of contracts are expressed as a percentage of the dollars involved in those contracts. As such, the actual outcome and the benchmark are expressed in terms that are directly

Figure VI-1. Calculation of disparity indices

The disparity index provides a straightforward way of assessing how closely actual utilization of an MBE//WBE group matches what might be expected given the relative availability of that MBE/WBE group for the work involved in a specific set of contracts. An index of "100" indicates an exact match between actual and expected utilization for that group (also referred to as "parity"). In BBC's disparity analysis, a disparity index is calculated for each MBE/WBE group for each set of contracts examined. One can directly compare an index for one group to another group, and between sets of contracts.

BBC calculates the disparity index for a particular group through the following formula:

% actual utilization x 100 % availability

For example, if actual utilization of WBEs in a set of ODOT contracts was 2% and the availability benchmark was 10% for those contracts, the index would be 2%÷10%, which is then multiplied by 100 to derive an index of 20. In this example, WBEs would have received 20 cents for every dollar expected to go to WBEs based on the availability benchmark.

comparable (e.g., 5% actual utilization compared with a benchmark of 4%). To help compare results between groups or across sets of contracts, BBC calculates a disparity index, as described in Figure VI-1.

Example of a disparity analysis table. Disparity results presented in this report are based on the more than 50 detailed disparity tables found in Appendix K (each table reports disparity study results for a different set of contracts). Therefore, it is useful to first review the calculation and presentation of results in these tables.

Figure VI-2 presents an example of a disparity table from Appendix K (it is labeled Figure K-3 in Appendix K). This disparity table pertains to FHWA-funded construction and engineering contracts that ODOT awarded for July 2004–June 2009. It includes dollars for prime contractors and subcontractors. The parameters for the set of contracts being examined are noted in the heading of each table. Appendix K contains similar tables for different sets of contracts, including results that separate prime contracts and subcontracts. Each set of contract elements is for a specific:

- Funding source (all funding sources, FHWA-funded or state-funded);
- Type of work (combined contracts, construction-related and engineering-related);
- Time period (the first half of the study period, which is July 2004—December 2006; the second half of the study period; which is January 2007—June 2009 and the entire study period); and
- Contract role (combined prime/sub, only prime contracts and only subcontracts).

BBC also completed disparity analyses for "small contracts" alone. The study team defined small contracts as \$5 million or less for construction and \$500,000 or less for engineering. Analyses that focus on small contracts are noted as such.

Utilization. Each of the disparity tables includes the same columns and rows:

- Column (a) notes the number of prime contracts and subcontracts in the set of contracting data under examination (in Figure VI-2, 6,306 total contracts and subcontracts).
- Column (b) identifies the dollars examined in the set of contract elements. Because "prime contract dollars" refers to the dollars retained by the prime contractor after deducting subcontract dollars, the combined prime/subcontract analyses equals the total contract amounts. Dollars are reported in thousands. This disparity table examines contract dollars totaling approximately \$2.9 billion.
- Column (c) provides utilization dollars by group after pro-rating any money going to
 firms identified as MBEs for which specific race/ethnicity information was not available.
 In the ODOT disparity analysis, there were no contract elements for which
 race/ethnicity of an MBE firm could not be determined.
- Column (d) portrays relative utilization on a percentage basis. Each percentage in column (d) is calculated by dividing dollars going to that group in column (c) by the total dollars in the set of contracts or subcontracts as shown in row (1) of column (c).

Figure VI-2 includes separate rows for each firm type:

- "All firms" in row (1) pertains to combined majority-, minority- and women-owned firms.
- Row (2) pertains to "WBEs," or white women-owned firms, whether or not they are certified as WBEs or DBEs.
- Row (3) pertains to "MBEs," or all minority-owned firms, regardless of certification.

Data for individual minority groups are shown in subsequent rows. Combined, those utilization dollars add up to the total for MBEs (in some cases, numbers may not perfectly add due to rounding).

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¹ Values for larger and smaller contracts were determined from BBC's analysis of the size distribution of ODOT contracts.

The bottom half of Figure VI-2 reports utilization for firms that were certified as DBEs. BBC included a row for white male-owned DBEs, though no such DBE-certified firms appeared to have received ODOT contracts or subcontracts examined in this study. DBE utilization data reported in the bottom half of Figure VI-2 were prepared independently from ODOT's DBE participation reports and thus do not match DBE utilization presented in those reports (for a discussion of differences, see Section V).

Figure VI-3. Definition of "substantial disparity"

Some courts deem a disparity index below 80 as "substantial" and accepted as evidence of adverse impact. See e.g., Rothe Development Corp v. U.S. Dept of Defense, 545 F.3d 1023, 1041; Eng'g Contractors Ass'n of South Florida, Inc. v. Metropolitan Dade County, 122 F.3d at 914, 923 (11th Circuit 1997); Concrete Works of Colo., Inc. v. City and County of Denver, 36 F.3d 1513, 1524 (10th Cir. 1994). See Appendix A for additional discussion.

Relative availability. BBC developed an estimate of relative availability of firms for each racial/ethnic/gender group following the procedures described in Section IV. Availability results, represented as a percentage, provide a benchmark against which to compare relative utilization for a specific group for a particular set of contracts. BBC separately calculated relative availability for each group and set of contracts/subcontracts.

Column (e) of Figure VI-2 reports relative availability for each group for ODOT's FHWA-funded construction and engineering contracts. Based on the types of work involved in the prime contracts and subcontracts included in the Figure VI-2 analysis, plus the sizes of the contract elements when they were awarded, BBC estimated that 12.7 percent of FHWA-funded contract dollars from July 2004 through June 2009 would be expected to go to minority- and women-owned firms after considering each firm's:

- Specialization;
- Interest and qualifications in prime versus subcontract work;
- Geographic reach;
- Bid capacity to perform the work; and
- Whether the firm was in business in the year ODOT awarded the contract.

This result can be found in row (2) of column (e) in Figure VI-2.

Differences between utilization and availability. The first step in analyzing whether there was a disparity between the relative utilization of a particular group and its relative availability is to subtract percentage utilization from percentage availability. For example, as reported in row (2), column (f) of Figure VI-2, MBE/WBE utilization was 6 percentage points above MBE/WBE availability.

It is sometimes difficult to interpret absolute differences between relative utilization and relative availability, especially when utilization and availability are relatively small. Therefore, BBC also calculated a "disparity index," which divides percentage utilization by percentage availability and multiplies the result by 100. An index of "100" means that there is "parity" between relative utilization and availability for a particular group. An index below 100, particularly below 80, may indicate a substantial disparity, as discussed in Figure VI-3 above.

Column (g) provides the disparity index for each group. For example, the disparity index of 33 for African American-owned firms shown in row (5) of column (g) means that utilization of African American-owned businesses in FHWA-funded contracts was much lower than what would be expected given the relative availability of African American-owned firms to perform that work. The disparity index of 147 for all MBE/WBEs shown in row (2) of column (g) indicates no underutilization of all minority- and women-owned firms considered together.²

Results when disparity indices are very large or when availability is zero. BBC applied the following rules when the disparity indices calculated were exceedingly large or could not be calculated because no firms were identified as available for the contracts under examination:

- When BBC's calculations showed a disparity index exceeding 200, BBC reported an index of "200+."
- When there was no utilization and 0 percent availability for a particular group for a set of contracts, BBC reported "parity" between utilization and availability (indicated by a disparity index of "100").
- When BBC identified utilization for a group but 0 percent availability (which could occur for many reasons, including the fact that one or more utilized firms were out of business by the time of BBC's availability survey), BBC reported a disparity index of "200+."

The DBE utilization statistics at the bottom of Figure VI-2 are provided as reference. BBC did not conduct disparity analyses for certified DBEs alone for the reasons described in Section IV.

B. Overall Disparity Results for ODOT Contracts

BBC summarizes results of the disparity analyses for each MBE/WBE group for:

- 1. FHWA-funded contracts;
- 2. State-funded contracts; and
- 3. All contracts.

1. FHWA-funded contracts. Figure VI-4 summarizes the results of the disparity analysis in Figure VI-2 using disparity indices by race/ethnic/gender group from column (g). The line down the center of the graph shows an index of 100, which indicates "parity" between relative utilization and relative availability for a particular group. Indices under 100 indicate a disparity between utilization and availability. The graph ends at a disparity index of 200 even though, in some cases, disparity indices exceed 200. For reference, a line is also drawn at an index of 80. Some courts use 80 as a threshold for what may indicate a substantial disparity, as discussed in Figure VI-3.

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² Note that all percentages in the disparity tables were rounded to the nearest tenth of 1 percent after making all calculations. Percentages correctly add and subtract, even though the rounding may make actual sums appear to differ by one tenth of 1 percent. In addition, the disparity index is derived from the detailed data for percentage utilization and availability before any rounding.

Figure VI-2.

MBE/WBE utilization, availability and disparity analysis for prime contracts/subcontracts on FHWA-funded construction and engineering contracts, July 2004–June 2009

		(a) Number of contracts (subcontracts)	(b) Total dollars	(c) Total dollars after Unknown MBE allocation	(d) Actual utilization (column c / column c, row1)	(e) Utilization benchmark (availability)	(f) Difference (column d - column e)	(g) Disparity index
Firm	Firm Type		(thousands)	(thousands)*	%	%	%	(d / e) x 100
(1)	All firms	6,306	\$2,851,094	\$2,851,094				
(2)	MBE/WBE	2,768	\$533,072	\$533,072	18.7	12.7	6.0	147.1
(3)	WBE	1,806	\$360,430	\$360,430	12.6	7.0	5.6	180.5
(4)	MBE	962	\$172,641	\$172,641	6.1	5.7	0.3	106.0
(5)	African American-owned	49	\$3,440	\$3,440	0.1	0.4	-0.2	33.0
(6)	Asian-Pacific American-owned	4	\$423	\$423	0.0	0.2	-0.2	7.6
(7)	Subcontinent Asian American-owned	9	\$648	\$648	0.0	0.1	-0.1	18.3
(8)	Hispanic American-owned	114	\$28,845	\$28,845	1.0	0.9	0.1	111.7
(9)	Native American-owned	786	\$139,285	\$139,285	4.9	4.1	0.8	118.6
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	2,038	\$227,091	\$227,091	8.0			
(12)	Woman-owned DBE	1,262	\$112,385	\$112,385	3.9			
(13)	Minority-owned DBE	776	\$114,705	\$114,705	4.0			
(14)	African American-owned DBE	41	\$3,140	\$3,140	0.1			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	3	\$319	\$319	0.0			
(17)	Hispanic American-owned DBE	95	\$28,126	\$28,126	1.0			
(18)	Native American-owned DBE	637	\$83,120	\$83,120	2.9			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

Notes: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Source: BBC Research & Consulting Disparity Analysis.

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

ODOT operated a DBE contract goals program for FHWA-funded construction contracts, which represent most of the contracts dollars examined in Figure VI-4. Therefore, any disparities identified in Figure VI-4 occurred even with the DBE contract goals program in place.

Overall, there was no disparity in the overall utilization of MBE/WBEs in ODOT's FHWA-funded contracts. However, when examined further, disparities do exist for individual groups. For example, the disparity index of 33 shown for African American-owned firms means that they received about 33 cents out of every FHWA-funded contract dollar that would be expected based on the availability benchmark for African American-owned firms for this work. Substantial disparities were also present for Asian-Pacific Americans and Subcontinent Asian Americans on FHWA-funded contracts during the study period. There were no disparities for WBEs, Hispanic American- and Native American-owned firms.

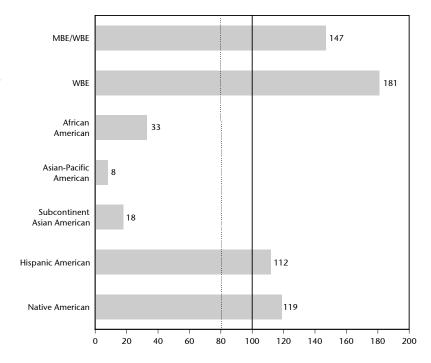
Figure VI-4.
Disparity indices for
MBE/WBE utilization as
prime contractors and
subcontractors on FHWAfunded construction and
engineering contracts,
July 2004–June 2009

Number of contracts/subcontracts analyzed

For more detail, see Figure K-3 in Appendix K.

Source:

BBC Research & Consulting



2. State-funded contracts. BBC examined \$453 million of state-funded contracts from July 2004 through June 2009 that were similar in work type to the FHWA-funded contracts included in the study. ODOT did not apply any form of contract goals to state-funded contracts. Figure VI-5 compares disparity results for state-funded contracts (lighter bars in Figure VI-5) with the results for FHWA-funded contracts (darker bars in Figure VI-5).

Overall MBE/WBE utilization was equal (18.7%) for FHWA- and state-funded contracts. Similar to the disparity analysis for FHWA-funded contracts, MBE/WBE utilization on state-funded contracts exceeded what would be expected based on availability for the particular types, locations and sizes of state-funded prime contracts and subcontracts (disparity index of 118).

Groups showing substantial disparities for FHWA-funded contracts also showed substantial disparities for state-funded contracts. Disparities were particularly severe for:

■ African American-owned firms (disparity index of 1),

- Asian-Pacific American-owned firms (disparity index of 0 as there was no utilization for this group based on the contract data BBC examined);
- Subcontinent Asian American-owned firms (disparity index of 7); and
- Although utilization was in line with availability for Hispanic American-owned firms on FHWA-funded contracts, there was a very large disparity for this group on state-funded contracts (disparity index of 16).

Utilization of WBEs on state-funded contracts was close to what would be expected based on the availability of white women-owned firms for this work. Utilization of Native American-owned firms was considerably higher than what would be expected based on availability.

Figure VI-5.
Disparity indices for
MBE/WBE utilization as
prime contractors and
subcontractors on FHWAand state-funded
construction and
engineering contracts,
July 2004–June 2009

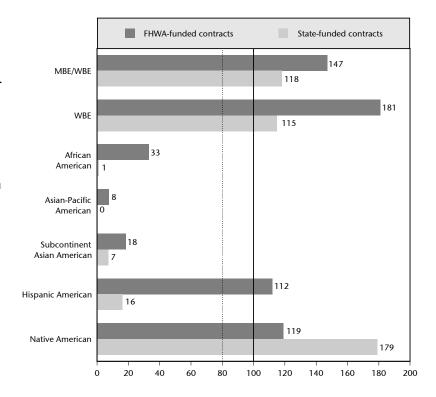
Note:

Number of contracts/subcontracts analyzed is 6,306 for FHWA-funded and 1,685 for state-funded contracts.

For more detail, see Figures K-3 and K-4 in Appendix K.

Source:

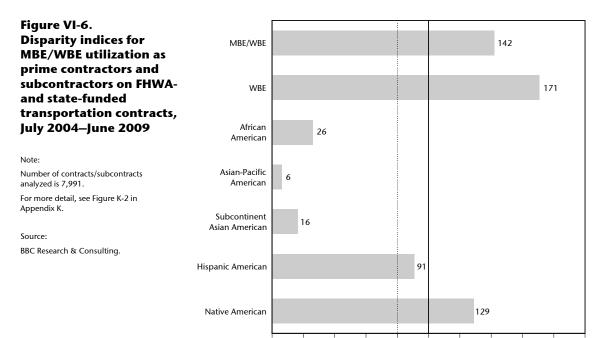
BBC Research & Consulting.



3. All contracts. Figure VI-6 shows combined results for FHWA- and state-funded contracts for July 2004 through June 2009. Overall, MBE/WBE utilization exceeded the availability benchmark. However, there were substantial disparities for African American-, Asian-Pacific American- and Subcontinent American-owned firms.

Because there was no disparity for Hispanic American-owned firms for FHWA-funded contracts and because FHWA contract dollars accounted for such a large proportion of total contract dollars, results in Figure VI-6 show that overall utilization was close to what would be expected based on availability of Hispanic American-owned firms. However, Figure VI-5 demonstrates very large disparities for Hispanic American-owned firms when the DBE contract goals program is not in place (i.e., for state-funded contracts).

There were also no disparities in the overall utilization of WBEs and Native American-owned firms.



Separate analyses for construction contracts and engineering contracts presented below begin to explore possible reasons behind any disparities identified for ODOT contracts considered together. BBC also conducted sophisticated statistical analyses to examine the likelihood that disparities may have occurred by random chance in the procurement process, which are presented at the end of this section.

Section VII examines other possible factors behind these disparities, using information including disparity analyses contained in Appendix K. Tables in Appendix K provide utilization, availability and disparity analyses for different types of ODOT contracts (construction and engineering), contract roles (prime contracts and subcontracts), locations within the state (five regions corresponding to ODOT divisions), sizes of ODOT contracts and time periods.

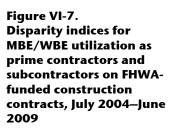
140

200

C. Disparity Results for Construction Contracts

The figures below present results for ODOT construction contracts, combining prime contract and subcontract dollars. BBC summarizes results of the disparity analyses for each MBE/WBE group for:

- 1. FHWA-funded construction contracts;
- 2. State-funded construction contracts; and
- 3. All construction contracts.
- **1. FHWA-funded construction contracts.** Figure VI-7 presents results of the disparity analysis for FHWA-funded construction contracts for July 2004–June 2009. Even with the DBE contract goals program that applied to these contracts, there were substantial disparities for African American and Asian-Pacific American-owned firms African American firms had a disparity index of 31 and Asian-Pacific American firms had an index of 0. Utilization exceeded what would be expected based on availability for each other MBE/WBE group.



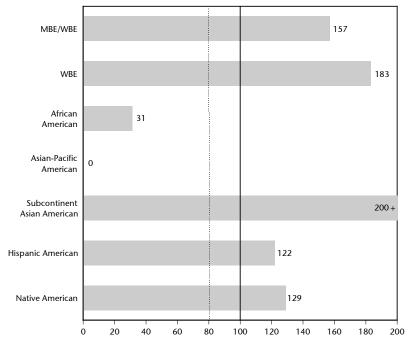
Note:

Number of contracts/subcontracts analyzed is 5,741.

For more detail, see Figure K-6 in Appendix K.

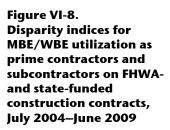
Source:

BBC Research & Consulting.



2. State-funded construction contracts. Figure VI-8 compares disparity indices for FHWA-funded construction contracts (top bar) with state-funded construction contracts (bottom bar). Figure VI-8 shows disparities for African Americans and Asian-Pacific Americans on both state- and FHWA-funded contracts. With the DBE goals program in place (FHWA-funded construction contracts), there was no disparity for Hispanic American-owned firms. Without the DBE goals program (state-funded construction contracts), there was a very large disparity for Hispanic American-owned firms.

For both FHWA- and state-funded construction contracts, there were no disparities for WBEs, Subcontinent Asian American-owned firms or Native American-owned firms.



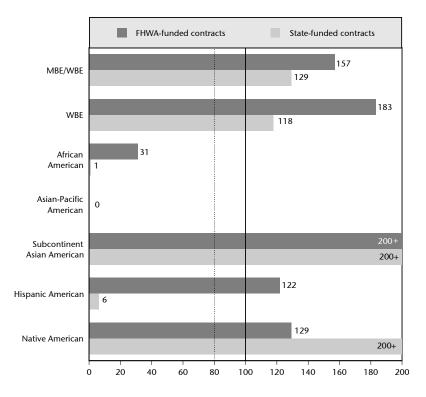
Note:

Number of contracts/subcontracts analyzed is 5,741 for FHWA-funded and 1,552 for state-funded contracts.

For more detail, see Figures K-6 and K-7 in Appendix K.

Source:

BBC Research & Consulting.



3. All construction contracts. Figure VI-9 shows combined results for FHWA- and state-funded construction contracts for July 2004 through June 2009. There were no overall disparities for MBE/WBEs. Because there were large disparities for both FHWA- and for state-funded contracts, analysis of combined construction contracts shows large disparities for African American- and Asian-Pacific American-owned firms. Utilization of WBEs, Subcontinent Asian American-owned firms and Native American-owned businesses exceeded respective availability benchmarks for these groups.

Utilization of Hispanic American-owned firms on state-funded contracts was far below what would be expected based on availability, and utilization exceeded availability for FHWA-funded contracts (DBE goals program was applied). Combined results for FHWA- and state-funded contracts for Hispanic American-owned firms indicates utilization of Hispanic American-owned firms to be below but close to what would be anticipated based on availability. As indicated in Figure K-6 in Appendix K, DBE-certified businesses accounted for nearly all of the utilization of Hispanic American-owned firms on ODOT construction projects, further indicating the influence of the DBE contract goals program on overall utilization of Hispanic American-owned companies.³

-

³ In contrast, relatively little of the utilization of WBEs on ODOT construction contracts was with DBE-certified firms (see Figure K-6). More than one-half of the utilization of Native American-owned firms on ODOT construction contracts was with DBE-certified firms.

Figure VI-9.
Disparity indices for
MBE/WBE utilization as
prime contractors and
subcontractors on FHWAand state-funded
construction contracts,
July 2004–June 2009

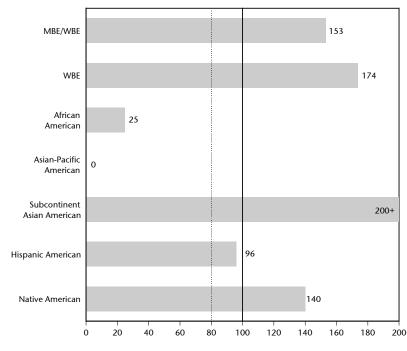


Number of contracts/subcontracts analyzed is 7,293.

For more detail, see Figure K-5 in Appendix K.

c

BBC Research & Consulting.



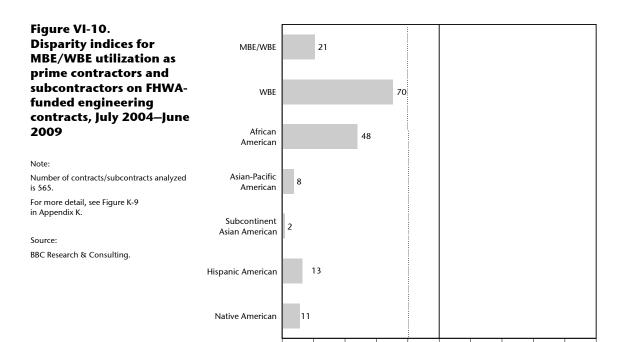
D. Disparity Results for Engineering Contracts

BBC also performed disparity analyses for ODOT engineering-related contracts for July 2004 through June 2009. As with the other analyses presented in Section VI, the figures below provide results for prime contract and subcontract dollars combined. ODOT did not employ contract goals for either FHWA- or state-funded engineering-related contracts during the study period. Only after July 2009 did ODOT begin setting DBE contract goals for certain FHWA-funded engineering contracts.

BBC summarizes results of the disparity analyses for each MBE/WBE group for:

- 1. FHWA-funded engineering contracts;
- 2. State-funded engineering contracts; and
- 3. All engineering contracts.

1. FHWA-funded engineering contracts. Figure VI-10 presents results of the disparity analysis for FHWA-funded engineering contracts. Each group of MBE/WBEs was substantially underutilized on these contracts. Each group except for WBEs received less than one-half of the contract dollars that would be expected based on availability for FHWA-funded engineering-related work.



2. State-funded engineering contracts. As with ODOT construction contracts, relatively little of the engineering-related contracts and subcontracts examined (by count and by dollars) were statefunded. Figure VI-11 presents disparity indices for state-funded engineering contracts. Overall utilization of MBE/WBEs on state-funded engineering contracts was about one-quarter of what would be expected based on MBE/WBE availability, and the study team identified disparities for each MBE/WBE group except for Hispanic American-owned firms.

Figure VI-11.
Disparity indices for
MBE/WBE utilization as
prime contractors and
subcontractors on statefunded engineering
contracts, July 2004–June
2009

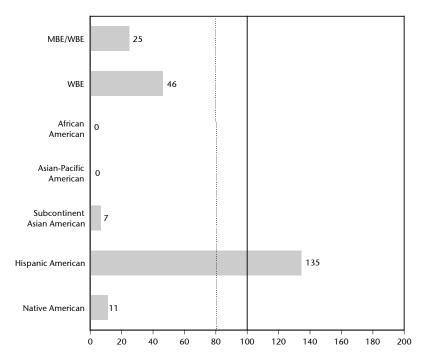
Note:

Number of contracts/subcontracts analyzed is 133

For more detail, see Figure K-10 in Appendix K.

Source:

BBC Research & Consulting.



3. All engineering contracts. Figure VI-12 shows combined results for FHWA- and state-funded engineering-related contracts for July 2004 through June 2009. Overall, utilization of MBE/WBEs was substantially less than what would be expected based on availability for these contracts (disparity index of 22). Utilization was substantially below availability for each MBE/WBE group.

Figure VI-12.
Disparity indices for
MBE/WBE utilization as
prime contractors and
subcontractors on FHWAand state-funded
engineering contracts,
July 2004—June 2009

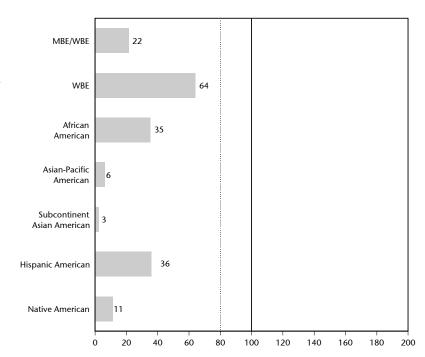
Note:

Number of contracts/subcontracts analyzed is 698.

For more detail, see Figure K-8 in Appendix K.

Source:

BBC Research & Consulting.



E. Analysis of Statistical Significance of Disparities

Statistical significance of any disparities relates to the degree to which a researcher can reject "random chance" as a cause. Random chance in data sampling is the factor that researchers consider most in determining statistical significance of results. However, BBC attempted to contact every firm in Oklahoma that Dun & Bradstreet identified as doing business within relevant subindustries (as described in Section IV), mitigating many of the concerns associated with random chance in data sampling as it relates to BBC's availability analysis. Further discussion of these issues is presented in Figure VI-13.

The utilization analysis also approaches a "population" of contracts. Therefore, any disparity found when comparing overall utilization with availability would be "statistically significant." BBC used a more sophisticated analytical tool to examine statistical significance of disparity results.

The discussion below explains:

- 1. Methodology of statistical significance testing; and
- 2. Results of the statistical significance analysis.

Figure VI-13. Confidence intervals for availability measures

BBC conducted telephone interviews with more than 2,000 business establishments -a number of completed interviews that is generally considered large enough to be treated as a "population," not a sample. BBC's analysis of the confidence interval around the estimate of MBE/WBE representation among all firms available for ODOT transportation work, 28.2 percent, is accurate within about +/-2 percentage point at the 95 percent confidence level (BBC applied the finite population correction factor when determining confidence intervals). At this level of accuracy in the availability analysis, a disparity index of 92 would technically be "statistically significant." (By comparison, many survey results for proportions reported in the popular press are +/- 5 percentage points.)

1. Methodology of statistical significance testing.

There were many opportunities in the sets of prime contracts and subcontracts that BBC analyzed for minority- and women-owned firms to be awarded work. Some contract elements involved large dollar amounts and others only involved a few thousand dollars.

Monte Carlo analysis is a useful tool to use for statistical significance testing, because there were many individual chances at winning work with ODOT between July 2004 and June 2009, each with a different payoff.

The Monte Carlo technique works as follows:

- The analysis starts by examining an individual contract element (a prime contract or subcontract).
- BBC's availability database provides information on individual firms "available" for that contract element based on type of work, prime versus subcontract role, size of the prime contract or

subcontract, and location of the work. Each available firm was assumed to have an equal chance of receiving that contract element.

The Monte Carlo simulation randomly chooses a firm from the pool of available firms to "receive" that contract element. For example, the odds of a woman-owned firm receiving that contract element are equal to the number of women-owned firms available for that work divided by the total number of firms available for that contract element.

- The Monte Carlo simulation repeats the above process for all other contract elements in the set. The output of a single Monte Carlo simulation for all contracts in the set represents simulated utilization of minority- and women-owned firms, by group, for that set of contract elements.
- The Monte Carlo simulation is then repeated 1 million times for each set of contracts. The combined output from all 1 million simulations represents simulated utilization of minority- and women-owned firms, by group, if contracts were awarded randomly based on the relative availability of Oklahoma firms working in relevant subindustries.
- **2. Results.** Figure VI-14 shows results of BBC's Monte Carlo simulations. Output of a Monte Carlo simulation is the number of runs out of 1 million that produce a result that is equal or below observed utilization in the actual data for each MBE/WBE group.

BBC only tested statistical significance for the disparities that the study team observed that fell below the threshold of 80. Some courts use 80 as a threshold for a value that may indicate a substantial disparity.

BBC first examined whether any of the disparities identified for all ODOT construction and engineering-related contracts could be easily replicated by chance in the procurement process. There was a very low probability that chance explained disparities for African American- and Asian-Pacific American-owned firms, as shown in the top portion of Figure VI-14. None of the 1 million simulation runs replicated the disparity found for African American-owned firms for combined FHWA- and state-funded contracts, and only 165 simulation runs did so for Asian-Pacific-owned firms.

Figure VI-14.
Statistical significance of disparities in MBE/WBE utilization for ODOT construction and engineering contracts

MBE/WBE Group	Disparity index	Number of simulation runs out of 1 million that replicated observed utilization	Probability of observed disparity occurring due to "chance"
FHWA-and state-funded contracts			
MBE/WBE	142	N/A	N/A %
WBE	171	N/A	N/A
African American	26	0	<0.1
Asian-Pacific American	6	174	<0.1
Subcontinent Asian American	16	57,188	5.7
Hispanic American	90	350,306	35.0
Native American	129	N/A	N/A
State-funded contracts			
MBE/WBE	118	N/A	N/A %
WBE	115	N/A	N/A
African American	1	0	<0.1
Asian-Pacific American	0	50,753	5.1
Subcontinent Asian American	7	335,757	33.6
Hispanic American	16	1	<0.1
Native American	179	N/A	N/A
Engineering contracts			
MBE/WBE	22	0	<0.1 %
WBE	64	28,256	2.8
African American	35	36,598	3.7
Asian-Pacific American	6	206	<0.1
Subcontinent Asian American	2	5,623	0.6
Hispanic American	36	46,300	4.6
Native American	11	0	<0.1

Note: "N/A" means "not applicable" because utilization exceeded availability.

Utilization and availability includes non-DBE-certified firms.

Source: BBC Research & Consulting.

The Monte Carlo simulation also showed a relatively low probability that chance can explain the disparities found for Subcontinent Asian American-owned firms when examining all contracts (5.7 percent of the simulation runs produced the disparity through chance in contract/subcontract awards). There was also a very low probability that chance can explain the disparity for Hispanic American-owned firms participating in state-funded ODOT contracts, as shown in the middle portion of Figure VI-14.

BBC also performed simulations of engineering-related contracts to determine whether disparities found for MBE/WBEs overall could be replicated by chance in contract/subcontract awards. None of the 1 million simulation runs replicated the disparity. For each of the MBE/WBE groups analyzed

for engineering contracts, the simulation showed low probabilities of chance replicating the disparities. These results are shown in the bottom portion of Figure VI-14.

F. Summary

The disparity analysis indicates that, without the DBE goals program, there are disparities for African American-, Asian-Pacific American-, and Hispanic American-owned firms on ODOT construction contracts. There were disparities for each MBE/WBE group on ODOT engineering-related contracts. No DBE contract goals applied to engineering-related contracts during the study period.

This information alone may not be sufficient for ODOT to make decisions as to future implementation of the Federal DBE Program. Using additional disparity analyses and other research, Section VII of the report explores why any disparities may be occurring.

-

⁴ Because of the limited number of engineering-related contracts and subcontracts, the Monte Carlo simulation focused on utilization of MBE/WBEs overall rather than individual MBE/WBE group.

SECTION VII. Exploration of Possible Causes of Any Disparities

Three key questions emerge from the disparities observed in MBE/WBE utilization on ODOT contracts described in Section VI:

- A. Are disparities found in some regions of the state and not in others?
- B. Why are there disparities for ODOT construction contracts?
- C. Why are there disparities for ODOT engineering contracts?

Answers to these questions may be relevant as ODOT considers whether all or how much of its overall annual DBE goal can be met through race- and gender-neutral means and what program elements may be needed in implementing the federal regulations. In accordance with the Federal DBE Program, results may also help the Department identify the specific racial/ethnic/gender groups that might be included in any future race- or gender-conscious programs.

A. Are disparities found in some regions of the state and not in others?

The study team examined disparity analysis results individually for five regions of Oklahoma:

- Northeast;
- Southeast;
- Central;
- Panhandle; and
- Southwest.

ODOT's state-funded contracts were the focus of this regional analysis, as no DBE contract goals applied to such projects. Section VI identified substantial disparities for African American-, Asian-Pacific American-, Subcontinent Asian-American- and Hispanic American-owned firms when examining all state-funded construction and engineering-related contracts.

For each region, BBC identified substantial disparities for each of the above groups when examining state-funded contracts. Appendix K provides detailed utilization and disparity results for state-funded contracts for each region, beginning with Figure K-37. It does not appear that disparities are found in some regions of the state and not in others.

B. Why are there disparities for ODOT construction contracts?

BBC examined several questions concerning disparity results for ODOT construction contracts:

- 1. Are there different results for prime contracts and subcontracts?
- 2. Are there disparities in the use of MBE/WBE prime contractors for small contracts?
- 3. Are there different results for subcontracts on FHWA-funded contracts and state-funded contracts?
- 4. Does ODOT award contracts to "the same large firms"?
- 5. Does analysis of MBE/WBE bids on construction prime contracts help to explain disparity results?
- 6. Does ODOTs bid or other processes for construction contracts explain any of the disparities?

1. Are there different results for prime contracts and subcontracts? BBC explored differences in MBE/WBE utilization for construction prime contracts and subcontracts.

Utilization. As shown in Figure VII-1 MBE/WBE utilization was much higher for subcontracts (33%) on ODOT construction projects than on prime contracts (14%). Because the majority of ODOT construction projects (and contract dollars) during the study period were FHWA-funded, DBE contract goals affected many of the contract dollars examined in Figure VII-1.

Figure VII-1.

MBE/WBE and DBE share of FHWAand state-funded prime contract
and subcontract dollars on ODOT
construction projects,
July 2004—June 2009

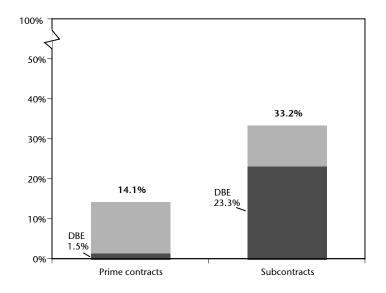
Note:

Number of contracts/subcontracts analyzed is 1,759 for prime contracts and 5,534 for subcontracts.

For more detail and results by group see Figures K-14 and K-23 in Appendix K.

Source:

BBC Research & Consulting from ODOT contract data.



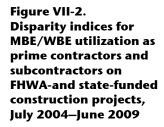
Disparity analysis. Figure VII-2 shows disparity indices for construction prime contracts (darker bars) and subcontracts (lighter bars) for each racial/ethnic/gender group. Because relative MBE/WBE availability is also substantially higher for construction subcontracts (22%) when compared with prime contracts (9%), the disparity results for MBE/WBEs overall is similar for construction subcontracts (index of 154) and prime contracts (index of 152).

BBC identified no construction prime contract dollars going to African American-, Asian-Pacific American- or Subcontinent Asian American-owned firms. The disparity index for African American-owned firms was 0. Because no Asian-Pacific American- or Subcontinent Asian-owned firms were available for ODOT construction prime contracts, disparity indices for these two groups is "parity" or "100" (see Section VI for further discussion of BBC's approach when both utilization and availability are zero).

BBC identified \$5.1 million of construction prime contract dollars (11 contracts) going to Hispanic American-owned firms. The resulting utilization — 0.2 percent — was less than the 0.6 percent availability for Hispanic American-owned firms for construction prime contracts. The disparity index for this group was 39, indicating a substantial disparity.

When considering construction prime contracts, utilization of white women-owned firms (10.4%) and utilization of Native American-owned firms (3.5%) exceeded availability for these groups.

Figure VII-2 also presents disparity indices for construction subcontracts. Even with application of DBE contract goals for most of these construction projects, there were still disparities in the utilization of African American- and Asian-Pacific American-owned firms as subcontractors.



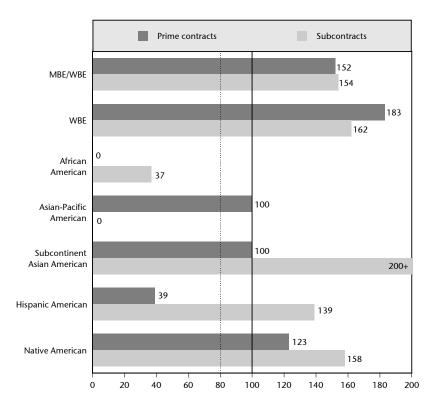
Note:

Number of contracts/subcontracts analyzed is 1,759 for prime contracts and 5,534 for subcontracts.

For more detail and results by group see Figures K-14 and K-23 in Appendix K.

Source:

BBC Research & Consulting.



2. Are there disparities in the use of MBE/WBE prime contractors for small contracts?

The size of ODOT prime contracts may present a barrier for certain MBE/WBE groups. A number of contractors interviewed by the study team indicated that size of ODOT contracts was a barrier to bidding (see Appendix I).

■ An interviewee representing a Hispanic American male-owned construction firm reported that the State has let contracts in excess of \$10 million and only one company

has the bonding capacity to bid on such a job. He reported that if the State were to break down such a contract into \$5 million increments that would provide him with the opportunity to bid.

- A Native American male owner and president of a DBE-certified general contracting company reported that he is aware of some attempts to segment large contracts, but he said that he still thinks that it is a big problem and that bundling is a big barrier to small contractors of any race or gender.
- A white male vice president of a white female-owned excavating firm stated that he
 believes the breaking up of large contracts into smaller pieces would be helpful for small
 businesses including MBE/WBE/DBEs.

To explore this issue, BBC examined MBE/WBE utilization and availability as prime contractors for construction contracts of \$5 million or less.

As shown in Figure VII-3, utilization of MBE/WBEs as prime contractors was somewhat higher for small construction contracts (18%) than all contracts (14%).

Figure VII-3.

MBE/WBE and DBE share
of FHWA- and statefunded construction
prime contract dollars
by contract size, July
2004—June 2009

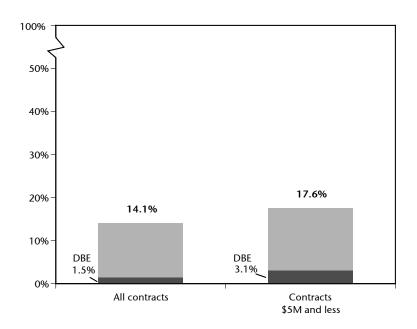
Note:

Number of all prime contracts analyzed is 1,759 for all contracts and 1,612 for contracts of \$5 million and less.

For more detail and results by group see Figures K-14 and K-50 in Appendix K.

Source:

BBC Research & Consulting from ODOT contract data.



BBC's disparity analysis shows similar results for small contracts (see Figure K-50 in Appendix K) as for all construction contracts (see Figure VII-2). Analysis of small construction prime contracts indicates substantial disparities for African American- and Hispanic American-owned firms.

3. Are there different results for subcontracts on FHWA-funded contracts and state-

funded contracts? Opportunities for minority- and women-owned firms as subcontractors on ODOT construction contracts may be affected by whether the DBE contract goals program is applied (for contracts that are FHWA-funded). A number of certified DBEs interviewed in the study indicated that they would be used on ODOT contracts that had DBE goals and would not be used when no goals were applied (see Appendix I). For example:

- The African American male and female owners of a DBE-certified construction firm stated, "If there is no DBE goal on that project, the average prime won't even consider you because he doesn't need you [to satisfy a goal]."
- Another interviewee representing a minority business development agency stated that the prime contractors that use his clients on public sector work typically do not use the firms for private sector work. He stated the prime contractors solely use his clients to meet the DBE goals. He stated that it does rarely occur that the prime contractors that have utilized DBE firms and found them to be capable hire the firm again. He said, "It happens, not often, but it happens."

BBC explored differences in MBE/WBE utilization as subcontractors as well as disparity results for FHWA- and state-funded contracts.

Utilization. As shown in Figure VII-4, MBE/WBE utilization on construction subcontracts was lower for state-funded than FHWA-funded contracts. MBE/WBEs received one-quarter of subcontract dollars on state-funded projects compared to one-third of FHWA-funded projects. DBE-certified firms accounted for a smaller portion of subcontract dollars on state-funded contracts (14%) compared with FHWA-funded contracts (24%).

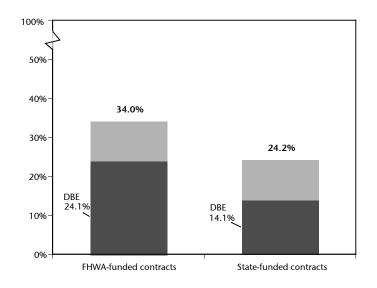
Figure VII-4.
MBE/WBE and DBE share of FHWAand state-funded construction
subcontract dollars, July 2004—
June 2009

Note:

Number of subcontracts analyzed is 4,511 for the FHWAfunded contracts and 1,023 for state-funded contracts. For more detail and results by group see Figures K-24 and K-25 in Appendix K.

Source:

BBC Research & Consulting from ODOT contract data.



Disparity analysis. Figure VII-5 examines disparity results for subcontracts on state-funded and FHWA-funded construction contracts. There were disparities between utilization and availability for both state-funded subcontracts (lighter bars) and FHWA-funded subcontracts (darker bars) for African American- and Asian-Pacific American-owned firms. There were also disparities for Hispanic American-owned firms for state-funded subcontracts (no goals program). When examining subcontracts on FHWA-funded projects, there were no disparities for Hispanic American-owned firms. This may be due to the DBE contract goals program applied to these contracts. DBE-certified firms accounted for nearly all of the utilization of Hispanic American-owned firms as subcontractors on FHWA-funded construction projects (see Figure K-24 in Appendix K).

Utilization of Native American- and white women-owned firms as subcontractors was in line with availability on state-funded construction contracts and substantially exceeded availability for FHWA-

funded contracts. Utilization of Subcontinent Asian-owned firms substantially exceeded availability for both state- and FHWA-funded subcontracts.

Figure VII-5.
Disparity indices for
MBE/WBE utilization as
subcontractors on
FHWA-and state-funded
construction projects,
July 2004—June 2009

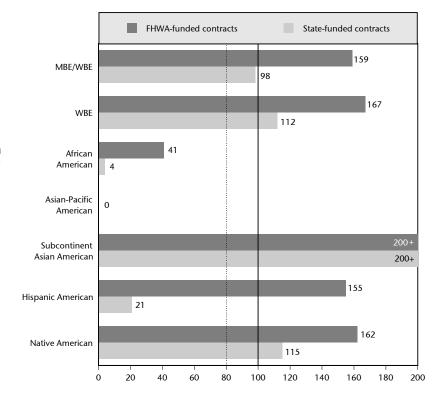
Note

Number of subcontracts analyzed is 4,511 for the FHWA-funded contracts and 1,023 for state-funded contracts.

For more detail and results by group see Figures K-24 and K-25 in Appendix K.

Source.

BBC Research & Consulting from ODOT contract data



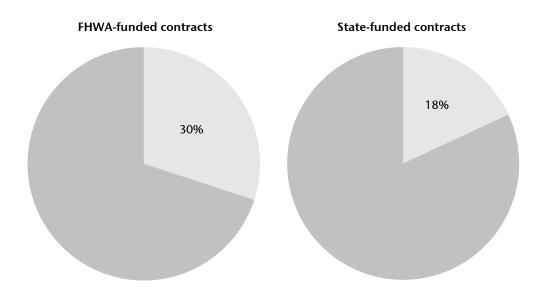
In sum, for certain MBE/WBE groups there were marked differences in opportunities as subcontractors between construction contracts with DBE goals and those without DBE goals:

- Results of the disparity analysis indicate that DBE contract goals for ODOT construction contracts had a considerable effect on the participation of Hispanic American-owned firms as subcontractors.
- For WBEs and Native American-owned firms, utilization substantially exceeded availability for FHWA-funded subcontracting. For state-funded construction subcontracts, utilization of WBEs and Native American-owned firms was in line with what would be expected based on availability.
- However, there were substantial disparities for African American- and Asian-Pacific American-owned firms on ODOT construction subcontracts with or without application of DBE contract goals.
- Although utilization of Subcontinent Asian American-owned firms as subcontractors on ODOT construction contracts was very small, there was no indication of disparities with or without DBE contract goals.

BBC also considered whether there was evidence that prime contractors self-performed more of the work (and subcontracted less of the project) when there were no DBE contract goals. As shown in

Figure VII-6, subcontracts accounted for 30 percent of the dollars of FHWA-funded construction contracts. Just 18 percent of state-funded construction contract dollars went to subcontractors (including MBE/WBE and non-MBE/WBEs).

Figure VII-6.
Subcontracting as a percentage of total construction contract dollars on FHWA-and state-funded contracts, July 2004—June 2009



Source: BBC Research & Consulting from ODOT contract data.

4. Does ODOT award contracts to "the same large firms"? In-depth interviews with firm owners and managers indicated that some believe that "the same large firms" typically receive ODOT contracting opportunities. BBC examined participation of different types of firms in construction subcontracts and prime contracts.

Participation as subcontractors. When examining all firms receiving subcontracts on ODOT construction contracts, it does not appear that the majority of subcontract dollars go to only a few firms.

BBC also researched this question for DBE firms. Together, three firms — Direct Traffic Control, Diamondback Steel Co., L.R. Toby Trucking — received about 30 percent of DBE subcontractor dollars on construction contracts during the study period. The top 15 firms combined represented two-thirds of DBE participation as subcontractors on construction contracts.

Participation as prime contractors. Overall, ODOT awarded approximately 35 percent of all construction prime contract dollars to five firms: TTK Construction, Haskell Lemon Construction, Becco Contractors, The Cumins Construction Co. and Sherwood Construction.

Two firms representing white woman-owned firms received more than 60 percent of all MBE/WBE construction prime contract dollars. Neither of these firms is DBE certified.

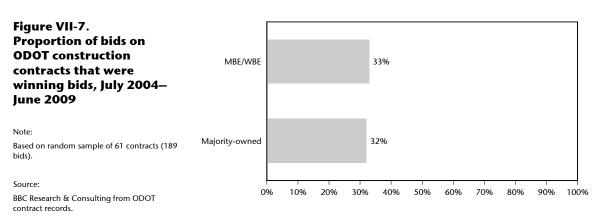
5. Does analysis of MBE/WBE bids on construction prime contracts help to explain disparity results? The study team collected bid information for a stratified random sample of 61 construction contracts. In total, 189 bids were submitted for these contracts.

Relative number of bids from MBE/WBEs. MBE/WBEs submitted 18 (10%) of the 189 bids:

- Two bids (1%) came from Native American-owned firms;
- Sixteen bids (8%) came from WBEs; and
- No bids came from other MBE/WBE groups.

The proportion of bids from MBEs and from WBEs was low compared with the share of firms available for prime construction contracts that were MBEs (14%) and WBEs (14%), as discussed in Section IV.

Success of bids. As shown in Figure VII-7, 33 percent of MBE/WBE bids were winning bids. A similar percentage of bids from majority-owned firms (32%) were winning bids. There is no evidence from analysis of bids that MBE/WBE bidders were less likely to be successful than majority-owned firms.



6. Do ODOT bid or other processes for construction contracts explain any of the disparities? ODOT has a low-bid system for awarding its construction contracts. However, a bid can only go to a low bidder if that bidder has met ODOT's prequalification, bonding and insurance requirements.

Notification of bid opportunities. The study team examined how ODOT notifies firms of opportunities to submit bids on construction contracts. For construction projects, ODOT posts bid opportunities known as "notice to contractors" on its website and advertises these opportunities in general circulation newspapers in the county where the project is located. Firms interviewed by the study team generally complimented ODOT on its efforts to make bidding opportunities known to potential bidders.

Even so, a number of interviewees recommended improvements to the notification process:

- Some interviewees reported that ODOT could do a better job of communicating with firms about construction opportunities within ODOT, including whom to speak with about these opportunities. For example, a white male co-owner of a transportation firm stated that more information on ODOT staff to contact when there were bid opportunities would enhance the availability and participation of small businesses. He said, "If I knew who to contact to bid on jobs, it would really help." Another interviewee represented by a white female president of a trucking company stated that ODOT should better notify the DBE firms of work opportunities by sending out bid sheets every month. She stated that ODOT should maintain more contact with the minority- and women-owned business to allow the firms to attempt to get work and submit bids.
- A number of interviewees commented on the overall communication efforts by ODOT. For example, an interviewee representing a white male-owned construction firm recommended that ODOT make full revisions to the website, better communicate with the public, and provide better responses to inquiries. Additionally, an interviewee representing a Hispanic trade association recommended that ODOT provide more outreach to the Hispanic community and that communications be bilingual.

Prequalification for type of work. It appears that there is no state law in Oklahoma requiring licensing of contractors for specific types of public works. Instead, ODOT prequalifies construction contractors for the types of work performed. BBC's analysis of the prequalification for type of work suggests that the process is relatively flexible.

The contractor seeking prequalification with ODOT must indicate the classes of work for which the contractor desires to bid.

- Contractors can and do request many classes of work and are typically approved for the requested classifications.
- An internal ODOT committee reviews this part of the prequalification application based on information the company has submitted concerning personnel, equipment, capital and experience, but does not verify the information submitted by contractors.

Lack of prequalification in a specific industry will not automatically disqualify a firm from being awarded a contract. Instead, ODOT will work with the firm to update the work class on the firm's prequalification application.

BBC examined whether there was evidence that ODOT's practice of prequalification disadvantaged minority- and women-owned firms.

- As of January 2010, there were 251 firms that had current ODOT prequalification for one or more types of ODOT construction prime contracts. Thirty of these firms (12%) were MBE/WBEs, less than one-half of what would be expected given the representation of MBE/WBEs among construction firms bidding as a prime contractor for public sector transportation contracts (28%).
- However, MBE/WBE firms available for ODOT construction prime contracts were no more or less likely than majority-owned firms to report difficulties with prequalification.
- Firms conducting in-depth personal interviews with the study team most often reported no issues with ODOT's prequalification process. Some MBE/WBE firms discussed the difficulty in attempting to perform work for ODOT, and indicated that ODOT was not seen as open to small contractors or minority- and women-owned firms (see Appendix I).

Prequalification for size of contract. ODOT's process for prequalifying contractors for sizes of contracts is less flexible than its process for prequalifying for class of work:

- ODOT establishes a dollar limit for work performed for ODOT as a prime contractor at any one time. ODOT determines the limit, in part, on audited financial statements that contractors seeking to bid on ODOT construction contracts submit every two years.
- A firm's prequalified total is calculated by subtracting current liabilities from current assets, and then multiplying by 2.5.
- A firm is only able to bid on projects at or under the determined prequalification amount for that specific firm after subtracting the ODOT work for which they are currently under contract. For example, if a firm was prequalified for \$100 million and they are currently contracted for a \$50 million ODOT project, this firm could only bid on another project not to exceed \$50 million.

However, ODOT considers contractors to be "fully qualified" if they have performed a minimum of three ODOT projects or projects worth \$5 million dollars or more requiring prequalification (and the firm once was prequalified for at least one year). If a contractor is found to be "fully qualified," the contractor's certificate of qualification will be reissued to allow the contractor to bid on and be awarded projects to the extent of its bonding capacity. In effect, the prequalification limits only apply to firms that are new to ODOT contracting as a prime contractor or have been less successful winning ODOT prime contracts.

On its face, the ODOT system for "fully qualifying" firms would favor firms that had already been successful in obtaining ODOT prime construction contracts and disadvantage new firms and those

See Section IV and Appendix C for a full discussion of the availability analysis.

that had been less successful in competing for these prime contracts. However, among prequalified firms in 2010, about the same share of MBE/WBEs as majority-owned firms were fully qualified by ODOT.²

- Among firms that had ODOT prequalification during the study period, MBE/WBEs were just as likely to be "fully qualified" as majority-owned firms.
- In BBC's telephone interviews with construction firms in the local marketplace, minority- and white female-owned firms were about as likely as majority-owned firms to report difficulties with the pregualification process (see Appendix F).

However, these comments were general in nature and were not focused on specific ODOT processes. A number of firms expressed their concern with the difficulty to win work with ODOT.

- Some interviewees expressed their difficulty in trying to win work with ODOT and other public agencies. For example, an interviewee representing a minority business development agency reported that it is easier to get work in the private sector. He indicated that he did not know why this was true, other than the "Good Old Boy Network' is engrained in the public [sector]." He reported that "[contractors] know who they will and won't work with and who they will give opportunity to work. If somebody knows 'Joe' and Joe is handling procurement, you talk to Joe about giving your friend an opportunity, and Joe is going to give your friend an opportunity."
- Another interviewee representing an African American male owner of a trucking firm stated that prequalification requirements are a potential barrier for firms because of the requirement of prior experience, but minority firms never get the opportunity to work so they cannot develop any experience.

Bonding. ODOT requires firms to be bonded in order to submit bids on most of its construction contracts. There is some evidence that minority- and women-owned firms are disadvantaged in accessing bonding.

- Some interviewees reported that obtaining bonding and meeting bonding requirements are barriers to doing business. For example, a Native American male president of a WBE construction firm stated that he believes that problems with access to bonding are based on discrimination targeted at small firms. He noted that smaller firms get charged higher premium rates. Another firm representing a Hispanic male-owned concrete paving firm said that bonding requirements and access to lines of credit "exclude DBEs right off the bat" because most DBEs "cannot get a half a million dollar bond."
- Study team telephone interviews with local construction and engineering firms included a question about whether they had experienced barriers or difficulties associated with bonding. Minority- and women-owned firms were nearly twice as likely as majorityowned firms to report difficulties obtaining bonding. Some firms indicated that barriers

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² As of 2009, 38 firms were fully qualified out of the 251 firms that ODOT had prequalified for construction prime contracts. Seven of the fully qualified firms were MBE/WBEs (including two DBEs).

associated with bonding prevent MBE/WBE firms from growing and that bonding is nearly impossible to obtain for small firms.

Insurance. Business insurance is required to work on most ODOT construction and engineering-related contracts. Information from the study team's in-depth personal interviews indicated that minority- and women-owned firms may face barriers in the Oklahoma insurance market.

- A number of interviewees discussing insurance reported that obtaining insurance was a barrier for MBE/WBE firms. For example, the African American male and female owners of a DBE-certified construction firm stated that they have had personal experience with insurance requirements and obtaining insurance being a barrier and believe that discrimination contributes to the barrier. They stated that when it was time for the firm to renew its general liability policy, they went into an agency in El Reno and the company refused to even quote a policy.
- In BBC's telephone interviews with Oklahoma businesses, firm owners and managers were asked if insurance requirements on projects had presented a barrier to bidding. Minority-owned firms were nearly twice as likely as majority-owned firms to report that insurance requirements were a barrier. WBEs were slightly more likely than majority-owned firms to report that insurance requirements were a barrier.

C. Why are there disparities for ODOT engineering contracts?

Disparity results for ODOT engineering contracts presented in Section VI of the report indicated substantial disparities in the utilization of WBEs and each MBE group. BBC explored the following questions:

- 1. Are there different results for prime contracts and subcontracts?
- 2. Are there different results for small prime contracts?
- 3. Does ODOT award contracts to "the same large firms"?
- 4. How does ODOT notify firms of engineering and other professional services bidding opportunities?
- 5. Is there anything in the consultant selection process that might work against MBE/WBEs?
- **1. Are there different results for prime contracts and subcontracts?** BBC examined MBE/WBE utilization and availability as prime consultants and subconsultants on ODOT engineering-related contracts.

Utilization. As shown in Figure VII-8, MBE/WBEs obtained about 7 percent of engineering-related subcontract dollars and about 4 percent of ODOT engineering-related prime contract dollars.

Figure VII-8.
MBE/WBE and DBE share of
FHWA-and state-funded prime
contract and subcontract dollars
on ODOT engineering-related
contracts, July 2004—June 2009

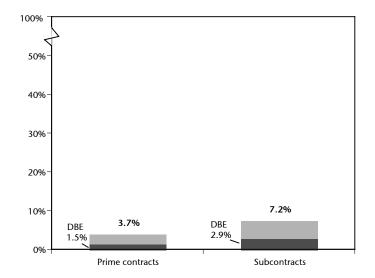
Note:

Number of contracts/subcontracts analyzed is 386 for prime contracts and 312 for subcontracts.

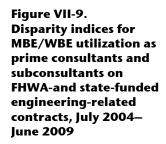
For more detail and results by group see Figures K-17 and K-26 in Appendix K.

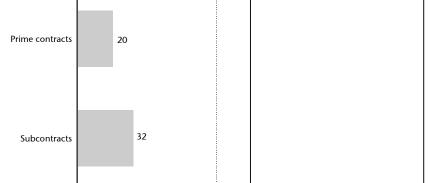
Source:

BBC Research & Consulting from ODOT contract data.



Disparity analysis. BBC identified disparities between MBE/WBE utilization and availability for engineering subcontracts and prime contracts. Figure VII-9 summarizes disparity results for MBE/WBEs overall. Figures K-17 and K-26 present disparity results for individual groups.





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Note:

Number of contracts/subcontracts analyzed is 386 for prime contracts and 312 for subcontracts.

For more detail and results by group see Figures K-17 and K-26 in Appendix K.

Source:

BBC Research & Consulting

BBC identified substantial disparities in the utilization of MBE/WBEs as prime consultants and subconsultants on both FHWA- and state-funded engineering-related contracts. During the study period, ODOT did not set goals on any engineering-related contracts. Figures K-27 and K-28 in Appendix K provide these results.

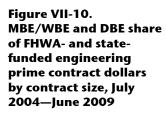
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Subcontracting as a percentage of engineering contract dollars. Subcontract data collected by BBC indicated that subcontract dollars accounted for 14 percent of engineering-related contract dollars (MBE/WBE and non-MBE/WBE subcontractors) during the study period.

2. Are there different results for small prime contracts? The study team examined whether the size of ODOT engineering contracts may be a barrier for MBE/WBEs. During the study period, about one-third of engineering contract dollars were accounted for by contracts of \$500,000 and less.

As shown in Figure VII-10, utilization of MBE/WBEs as prime consultants on small contracts (9%) was higher than for all engineering-related contracts (4%).



Note:

Number of all contracts analyzed is 386 for all contracts and 297 for contracts of \$500,000 and less.

For more detail and results by group see Figures K-17 and K-53 in Appendix K.

Source:

BBC Research & Consulting from SDCRAA contracting data.

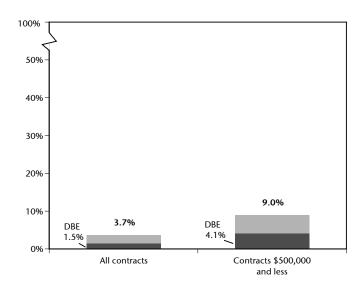
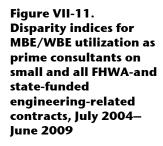


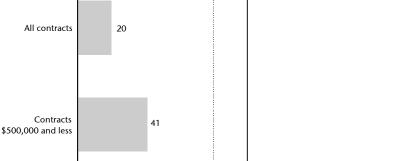
Figure VII-11 shows overall MBE/WBE disparity indices for all engineering-related contracts and for contracts of \$500,000 or less. The disparity index of 41 indicates a substantial disparity for MBE/WBEs on ODOT's small engineering contracts. Figure K-53 presents detailed results for individual MBE/WBE groups.

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Note

Number of all contracts analyzed is 386 for all contracts and 297 for contracts of \$500,000 and less.

For more detail and results by group see Figures K-17 and K-53 in Appendix K.

Source

BBC Research & Consulting.

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3. Does ODOT award contracts to "the same large firms"? BBC researched whether just a few firms participate in ODOT engineering-related contracts.

Participation as subconsultants. Overall, about 40 percent of the subconsultant dollars on ODOT engineering-related contracts went to just four firms (Terracon Consultants, Bridgefarmer & Associates, Professional Service Industries and White Engineer Associates). None of these firms was minority- or woman-owned.

Two firms — Aerial Data Services Inc. and Infrastructure Engineers, Inc. — accounted for more than 50 percent of total MBE/WBE participation as subconsultants on ODOT engineering-related contracts.

A very small portion of engineering-related dollars went to DBE subconsultants. Four firms accounted for about one-half of the engineering related dollars that went to DBE subconsultants.

Participation as prime consultants. Overall, about one-half of ODOT engineering-related prime contract dollars went to just five majority-owned firms (Cobb Engineering, Engineering Services and Testing, Tetra Tech, Atkins Benham and Poe & Associates).

Four firms represent more than 60 percent of all dollars of engineering-related prime contracts going to MBE/WBEs (Guy Engineering Services, Perez Engineering, Aerial Data Services and Able Consulting). Each of these firms was white women- or Hispanic American-owned.

- **4.** How does ODOT notify firms of engineering and other professional services bidding opportunities? ODOT posts solicitations for engineering work on its website and e-mails notifications to firms in its database of firms who have done work with ODOT or are interested in ODOT engineering contracts. The study team's discussions with engineering-related firms indicated some difficulty in being notified of engineering opportunities with ODOT (see Appendix I).
- An interviewee representing an African American male owner of a DBE-certified safety and environmental consulting firm stated that a solicitation came out in March containing eight projects, two of which were environmental projects his firm could perform. He stated that he did not receive any notification. He stated that he only found out about the work opportunity because another small environmental firm that he had teamed up with in the past e-mailed him the package to inquire if he was interested in working on the project. He stated that he immediately contacted ODOT to find out why he did not receive the solicitation notification. The interviewee reported that ODOT responded that there was some mix up in the process but assured him he was on the list and would receive future notifications.
- Another interviewee representing a female-owned non-certified civil engineering and land surveying firm, commented, "It's so hard to get into the preferred lists ... the short lists ... despite the fact that you have a reputation."

- **5.** Is there anything in the consultant selection process that might work against **MBE/WBEs?** A number of MBE/WBE engineering and other professional services firms indicated disadvantages when competing for ODOT work as a prime consultant.
- For example, the operations coordinator for a trade association providing economic business development assistance reported that "there is some frustration among the professionals that do engineering and architectural work as far as getting work. I think part of it is that most of them either have just established or have small entities, and it appears ... that ODOT really likes to go with more-established entities in doing that kind of work."
- The Native American female president of an engineering firm stated, "We can't prove unfair denial [of contracts awards]. They just say we didn't meet their criteria; we didn't have repeat business; we didn't have a long-history relationship with ODOT. Well if we don't get one [contract] to at least show our performance and that we can fulfill the contract goals and can do a project from start to finish, there is no way to ever get into this cycle. We can't get in because we can't even get on this merry-go-round."

Short-listing and selection process. ODOT typically begins the consultant selection process for an engineering-related contract by requesting that consultants submit letters of interest and response packets, which are evaluated by a panel within ODOT.³ The ODOT panel typically evaluates consultants based on the following criteria:

- **Local office.** One of the key evaluation factors is whether the firm has an office or branch in Oklahoma.
- **Experience.** Evaluators measure the experience and/or familiarity of the proposed consultant team with ODOT procedures.
- **Ability.** The ability of the firm to do the work is considered, including specialized qualifications.
- **Capacity.** Capacity of the consultant team to accomplish the work in accordance with the anticipated schedule considering current workloads is considered.
- **Past performance.** Past performance of the consultant on prior ODOT projects is also an evaluation factor.

From the list of consultants that submitted letters of interest, the ODOT panel selects a "short list" of consultants to be asked to an interview. ODOT typically includes a minimum of the three highest-ranking consultants in the interviews.

Consultants for engineering are selected based on the combined score of their letter of interest and presentation of the technical proposal during an interview. Price is negotiated after the consultant is selected.

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³ The ODOT evaluation panel is a minimum of three representatives with knowledge and expertise in the critical aspects of the project.

Analysis of the success of MBE/WBEs participating in the ODOT consultant selection process.

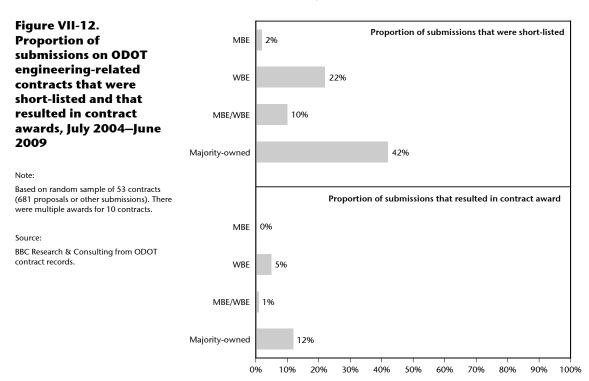
BBC analyzed MBE and WBE success when competing for engineering-related contracts. For 53 engineering-related projects, the study team collected information that each proposing firm submitted. Of the 681 submissions, 45 (7%) were submitted by MBEs and 22 (3%) were submitted by WBEs.

There were disparities in the likelihood that ODOT would short-list a firm based on its submission. The top portion of Figure VII-12 shows that:

- Only one of the submissions from MBEs (2% of the MBE submissions) resulted in short-listing;
- About 22 percent of the submissions from WBEs resulted in the firm being short-listed;
 and
- More than 40 percent of majority-owned firms' submissions resulted in short-listing.

As shown in the lower portion of Figure VII-12, BBC also calculated the percentage of submissions that resulted in contract awards:

- None of the 45 submissions from MBEs resulted in a contract award (0% success).
- One submission from a WBE resulted in an award, a success rate of 5 percent.
- All but one of the sampled contract awards went to majority-owned firms (72 awards from 614 submissions for a success rate of 12 %).



For the 350 proposal submissions received on a sample of 18 engineering-related projects, BBC compared the proposal evaluation scores received by majority-owned firms with those received by MBEs and WBEs. Engineering-related proposals are initially evaluated across six categories, with each category receiving a score from 1 to 10. Typically, a team of three evaluators reviewed each proposal submission. As listed in the scoring sheets, the evaluation categories are:

- Location of the firm's office where the work will be completed. Preference will be afforded to Oklahoma domiciled firms (8 points for out of state and 10 points for in state firms).
- Experience of the proposed Consultant Team with Department procedures.
- Ability of the Consultant Team to perform the type of work contemplated.
- Specialized qualifications of the Consultant Team applicable to the type of work contemplated.
- Capacity of the Consultant Team to accomplish the work in accordance with the anticipated schedule considering current workloads.
- Past performance of the Consultant Team.

For the submittals examined, the average scores given to the group of MBE proposals and the group of WBE proposals were lower than scores assigned to majority-owned firms in four of the six evaluation categories:

- Experience,
- Ability to perform the work,
- Specialized qualification applicable to the work; and
- Past performance.

These differences in average scores were statistically significant at the 95 percent confidence level. The only evaluation category in which MBEs and WBEs outscored majority-owned firms was in capacity to accomplish the work (statistically significant difference only for MBEs).

Summary

Section VI identified disparities in the participation of African American-, Asian-Pacific American- and Hispanic American-owned firms in ODOT construction contracts, especially on state-funded contracts where no DBE contract goals are applied. Even on construction contracts with DBE contract goals, large disparities were present for African American- and Asian-Pacific American-owned firms.

These disparities persist in the additional analyses presented in Section VII. Disparities exist across regions of the state, for subcontracts, and for small as well as all prime contracts. There is evidence that certain groups of MBEs do not have the same opportunities as other firms in obtaining ODOT construction prime contracts and subcontracts. ODOT prequalification, bonding and insurance requirements may negatively affect prime construction contract opportunities for these groups based on the quantitative and qualitative information examined.

For each group of MBEs and for white women-owned firms, Section VI identified disparities between utilization and availability for ODOT engineering-related contracts. Section VII presents quantitative and qualitative evidence that MBE/WBEs do not have the same outcomes as majority-owned firms when seeking ODOT engineering-related prime contracts. There are also disparities in the use of MBE/WBEs as subconsultants on ODOT engineering-related contracts.

SECTION VIII. Overall Annual DBE Goal

As part of implementing the Federal DBE Program, ODOT must set an overall annual DBE goal. Federal regulations (49 CFR Part 26.45) outline a two step process for setting the overall goal:

- Step 1: Establishing a base figure; and
- Step 2: Making any needed adjustment to the base figure.

Step 1: Establishing a Base Figure

As presented in the Section IV availability analysis, minority- and women-owned firms currently or potentially certified as DBEs would be expected to receive 9.3 percent of prime contract and subcontract dollars for ODOT's FHWA-funded contracts, based on their relative availability for that work.

- ODOT should consider 9.3 percent as the base figure for its overall annual aspirational goal for DBE participation if the types of FHWA-funded contracts for the time periods covered by future goals will be similar to FHWA-funded contracts from July 2004 through June 2009. If the mix of work between construction- and engineering-related procurements will differ in the future, ODOT can apply new weights to develop a new base figure. (As shown in Figure VIII-1, the current weight is 95 percent for construction contracts and 5 percent for engineering-related contracts.)
- ODOT must develop goal for DBE participation including all DBE groups, and should not subdivide the goal by DBE group. (The data BBC presents by DBE group is to document how the overall DBE goal might be calculated.)
- The 9.3 percent base figure is similar to the 8 to 9 percent annual DBE goals ODOT established during study period years. ODOT only included certified DBEs in its base figure calculations. BBC also counted minority- and women-owned firms that possibly could be certified as DBEs but are not currently certified. BBC also had more detailed information concerning available firms and performed a more sophisticated analysis of relative availability for individual MBE/WBE groups.

Figure VIII-1 on the next page summarizes base figure information also presented in Section IV.

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¹ See 49 CFR Section 26.45 (h).

² Consistent with USDOT guidance, as discussed in Section IV.

Figure VIII-1.

Calculation of base figure for overall annual DBE goal

	Utilization benchmark (availability %)		
Potential DBEs	Construction	Engineering	Total
African American-owned	0.3 %	0.9 %	0.4 %
Asian-Pacific American-owned	0.0	3.9	0.2
Subcontinent Asian American-owned	0.0	0.0	0.0
Hispanic American-owned	0.7	1.4	0.7
Native American-owned	4.0	7.0	4.1
WBE (white women-owned)	4.0	<u>3.1</u>	3.9
Total potential DBEs	9.0 %	16.2 %	9.3 %
Sector weight	95 %	5 %	

Step 2: Making Any Needed Adjustment to the Base Figure

ODOT can make upward or downward adjustments to the base figure as it determines its overall annual DBE goal. It does not have to make a step 2 adjustment as long as it considers appropriate factors and explains its decision.

The Federal DBE Program outlines factors that recipients of USDOT funds must consider when assessing whether to make a "step 2" adjustment to the base figure:³

- 1. Current capacity of DBEs to perform work, as measured by the volume of work DBEs have performed in recent years;
- 2. Information related to employment, self-employment, education, training and unions;
- 3. Any disparities in the ability of DBEs to get financing, bonding and insurance; and
- 4. Other relevant data.

BBC completed an analysis of each of the step 2 factors and was able to quantify the effect of certain factors on the base figure. Other information BBC examined was not as easily quantifiable, but is still relevant as ODOT assesses whether or not to make a step 2 adjustment.

³ 49 CFR Section 26.45

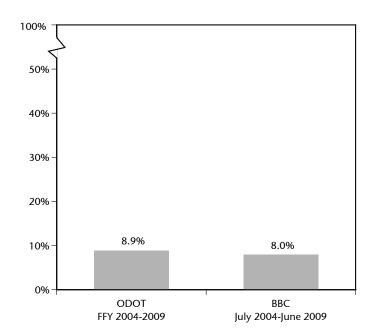
1. Current capacity of DBEs to perform work, as measured by the volume of work DBEs have performed in recent years. ODOT's DBE participation reports to FHWA for the past five years indicate median DBE participation of 8.9 percent. BBC's independent analysis indicates 8.0 percent DBE utilization for FHWA-funded contracts (based on aggregate utilization over this period, not median utilization for the five years). Figure VIII-2 presents these estimates.

Figure VIII-2.
Estimates of DBE
participation on FHWAfunded contracts

Note: Number of FHWA-funded contracts/subcontracts analyzed by BBC is 6,306. For more detail, see Figure K-3 in Appendix K.

Source:

BBC Research & Consulting from ODOT's DBE participation reports and ODOT contract data.



2. Information related to employment, self-employment, education, training and unions. Section III of the report summarizes information concerning local marketplace conditions for minorities and women. Detailed analyses of the Oklahoma marketplace are presented in Appendices D, E, F, G and I. BBC's analysis suggests that there are certain barriers affecting entry, advancement and business ownership for minorities and women in the Oklahoma construction and engineering industries:

- Taken together, this information suggests that barriers to employment, self-employment and education exist for certain minority groups and women in Oklahoma.
- It follows that such barriers have affected the relative availability of minority- and women-owned firms to perform ODOT work.
- It may not be possible to properly quantify the extent to which barriers to employment, education and training may have depressed the relative number of minority- and women-owned firms in the local industry. However, the effect of disparities in self-employment on relative availability can be quantified, as discussed below.

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⁴ Based on median reported utilization for FFY 2004-2009

Quantitative information on self-employment. Through regression models, BBC investigated whether race/ethnicity/gender influenced rates of business ownership among Oklahoma workers after accounting for the effects of several neutral factors. Section III of the report summarizes BBC's analyses and Appendix E provides detailed results of the regression models.

BBC identified statistically significant disparities in business ownership rates for most minority groups and for women working in both the construction and engineering industries. BBC calculated the impact on the base figure if certain minority groups (and women) owned businesses at the same rates as similarly situated non-minorities (and men). These "but for" calculations are presented in Figure VIII-3. BBC's calculations include the same categories of contracts used when determining the base figure (i.e., construction and engineering-related services). BBC made the calculations in the following way:

- BBC made separate "but for" calculations for construction and engineering, and then
 weighted them based on ODOT's dollars of FHWA-funded contracts for those types of
 procurements.
- Within construction and engineering, BBC calculated potential base figure adjustments only for those firms for which regression analyses showed statistically significant disparities in business ownership. Thus, for construction, BBC calculated potential availability adjustments for African Americans, Hispanic Americans, Native Americans and white women. For engineering, BBC calculated potential adjustments for African Americans, Hispanic Americans, other minority groups (which primarily pertains to Asian-Pacific Americans and Subcontinent Asian Americans) and white women.

The columns of Figure VIII-3 represent the following:

- a. Current availability. Column (a) shows the current availability of potential DBEs as presented in Section IV.
- b. **Disparity indices for business ownership.** Column (b) presents disparity indices in business ownership for the different race/ethnic/gender groups. See Section III and Appendix E for an explanation of the regression models on which BBC based these disparities.
- c. Availability after initial adjustment. Column (c) presents initial availability estimates after adjusting for statistically significant disparities in business ownership. BBC calculated those estimates by dividing the current availability in column (a) by the disparity index for business ownership in column (b) and then multiplying by 100.

⁵ BBC examined U.S. Census data on business ownership rates using methods similar to analyses examined in the court cases involving state departments of transportation in Illinois and Minnesota. At the time of this report, the most extensive data on business ownership come from the 2000 Census. The analyses of these data provide the highest level of accuracy and detail and are the focus of this summary.

- d. Availability after scaling to 100%. Column (d) shows adjusted availability estimates that were re-scaled so that the sum of the estimates equal 100 percent. BBC re-scaled the adjusted availability estimates by taking each group's adjusted availability estimate in column (c) and dividing it by the sum of availability estimates shown under "Total firms" in column (c) and multiplying by 100. (e.g., for Native American-owned firms, [4.7% ÷ 103.8%] X 100 = 4.5%).
- e. Components of goal. Column (e) shows the component of the total goal attributed to the adjusted MBE/WBE availability in each procurement area. BBC calculated each component by taking the total DBE availability estimate shown under "Total small minority and female" in column (d) and multiplying it by the proportion of total FHWA-funded contract dollars for construction and engineering (95% for construction and 5% for engineering-related contracts). The study team took the 12.4 percent shown under "Total small minority and female" in column (d) for construction (12.4%) and multiplied it by 95 percent for a result of 11.8 percent. The column (d) figure for engineering (23.6%) was multiplied by its weight of 5 percent for a result of 1.2 percent. The values in column (e) were then summed to equal the total adjusted DBE availability (last row of Figure VIII-3). This figure rounds to 12.9 percent.

In sum, the potential step 2 adjustment indicates an annual aspirational goal of 12.9 percent.

Figure VIII-3.
Potential adjustment to base figure for overall annual DBE goal

Business ownership	a. Current availability	b. Disparity index for business ownership	c. Availability after initial adjustment*	d. Availability after scaling to 100%	e. Component of goal**
Construction					
African American	0.3 %	54	0.6 %	0.5 %	
Hispanic American	0.7	59	1.2	1.1	
Native American	4.0	86	4.7	4.5	
Other minority groups	0.0	no adjustment	0.0	0.0	
White women	4.0	62	6.5	6.2	
Total small minority and female	9.0 %		12.8 %	12.4 %	11.8 %
Majority and large MBE/WBE	91.0		91.0	87.6	
Total firms	100.0 %		103.8 %	100.0 %	
Engineering					
African American	0.9 %	32	2.8 %	2.6 %	
Hispanic American	1.4	66	2.1	1.9	
Native American	7.0	no adjustment	7.0	6.4	
Other minority groups	3.9	36	10.8	9.9	
White women	3.1	75	3.1	2.8	
Total small minority and female	16.2 %		25.9 %	23.6 %	1.2 %
Majority and large MBE/WBE	83.8		83.8	<u>76.4</u>	
Total firms	100.0 %		109.7 %	100.0 %	
Total small minority and female after adjustments and weighting					12.9 %

Note: * Initial adjustment is calculated as current availability divided by the disparity index.

Source: BBC Research & Consulting.

^{**} Components of goal calculated as value after adjustment and scaling to 100% multiplied by percentage of total FWHA-funded contract dollars in that category (construction is 95%, engineering is 5%).

^{***} Small minority and female firms includes those firms that BBC surveyed and who reported annual revenues below the Federal DBE revenue caps. MBE/WBE firms reporting annual revenues over DBE limits are not included in this total.

3. Statistical disparities in the ability of DBEs to get financing, bonding and insurance.

BBC collected and analyzed information concerning access to financing, bonding and insurance. There is evidence that minority- and women-owned firms do not have the same access to capital as majority-owned firms.

Any barriers in access to capital, bonding and insurance would affect the opportunities for minorities and women to form and successfully operate construction, engineering and related firms.

- As discussed in Section III, because firms typically must have working capital, bonding and insurance to be awarded and perform ODOT construction prime contracts, any greater barriers to obtaining these business inputs for minorities and women would place these firms at a disadvantage in obtaining ODOT construction contracts.
- Similarly, if minority- and women-owned engineering and related firms face disadvantages obtaining financing and insurance, they may have disadvantages obtaining ODOT professional services contracts. Insurance is a requirement for obtaining ODOT work and sufficient working capital is a practical necessity to perform ODOT contracts.

Unequal access to financing, bonding and insurance may adversely affect the current availability of minority- and women-owned firms to perform ODOT work, which adds to the evidence for an upward Step 2 adjustment. However, the impact on the base figure could not be explicitly quantified. Section III summarizes this information, Appendix F presents detailed quantitative analyses and Appendix I reviews relevant qualitative information.

4. Other relevant data. The Federal DBE Program suggests that federal aid recipients also examine "other factors" when determining whether to make a step 2 adjustment to the base figure. One factor BBC examined was the relative success of minority- and women-owned firms in the local transportation contracting industry. There is evidence of disparities for certain groups of minority- and women-owned firms. Section III summarizes this information, Appendix G presents detailed quantitative analyses and Appendix I provides a review of qualitative information collected as part of the study.

As with access to financing, bonding and insurance, quantification of how these factors affect the base figure was not possible.

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⁶ 49 CFR Section 26.45

Summary of information for step 2 analysis. BBC's in-depth analysis of each factor outlined in the Federal DBE Program suggests that ODOT consider one of the following options concerning a step 2 adjustment.

Option 1 – making an upward adjustment. Over the long-term, there are reasons that ODOT might consider a higher overall aspirational goal than the 9.3 percent base figure.

- If ODOT were to make an upward adjustment, it might consider the 12.9 percent figure for DBE participation after adjusting for business ownership rates (shown in Figure VIII-2).
- Analyses of access to capital and other factors summarized above also support an overall annual aspirational goal higher than 9.3 percent.

Option 2 – making no step 2 adjustment. USDOT regulations clearly state that an agency such as ODOT is required to review a broad range of information when considering whether a step 2 adjustment is necessary. ODOT, however, is not required to make such an adjustment as long as it can explain what factors were considered and why no adjustment is warranted. As emphasized in the USDOT Tips for Goal Setting, "If the evidence suggests that an adjustment is warranted, it is critically important to ensure that there is a rational relationship between the data you are using to make the adjustment and the actual numerical adjustment made."

After considering marketplace conditions and past DBE participation, ODOT might adopt the 9.3 percent base figure for its overall annual aspirational goal for DBE participation without making a step 2 adjustment.

- Marketplace conditions, especially the analysis of business ownership, indicate an upward adjustment.
- However, other factors may indicate a downward adjustment. BBC's estimate of overall DBE participation on FHWA-funded contracts for July 2004 through June 2009 was about 8.0 percent and ODOT's assessment of median DBE participation indicated 8.9 percent. This level of participation may represent a minimum demonstration of "current capacity of DBEs to perform work," which is slightly lower than the 9.3 percent base figure.

ODOT's decision concerning a step 2 adjustment must explain each of the factors considered.

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⁷ USDOT. Tips for Goal-Setting in the Federal Disadvantaged Enterprise (DBE) Program. http://www.osdbu.dot.gov/DBEProgram/tips.cfm.

SECTION IX.

Percentage of Overall Annual DBE Goal to be Met **Through Neutral Means**

The Federal DBE Program requires state and local transportation agencies to determine whether the overall annual DBE goal can be met solely through race-neutral measures, or whether race-conscious program elements such as DBE contract goals are also needed. Race-neutral program elements are initiatives that help all businesses or small businesses in general, including — but not limited to — DBEs. Agencies must meet the maximum feasible portion of the overall annual DBE goal using raceneutral means.1

An agency's consideration of neutral measures includes projecting the portion of its overall annual DBE goal that can be met through neutral programs:

- If it determines that it can achieve its annual DBE goal by race-neutral means and that no race-conscious elements are appropriate or required, an agency would submit its program using only race-neutral means for USDOT approval — it would project that 100 percent of its overall annual DBE goal could be met through neutral means and that 0 percent would need to be met through race-conscious means.
- If a combination of neutral and race-conscious measures is determined by the agency to be needed to meet its overall annual DBE goal, the agency would project the relative portion of the overall annual DBE goal to be met through neutral and race-conscious means.

In narrowly tailoring its implementation of the Federal DBE Program to reflect local marketplace conditions, an agency that determines race- conscious measures are necessary needs to consider whether any race-conscious remedies such as DBE contract goals should be restricted to certain DBE groups. As discussed in Section I, several DOTs obtained waivers from USDOT that allow them to implement contract goals programs that apply to underutilized DBEs (UDBEs), which include some but not all of the racial/ethnic/gender groups presumed to be socially disadvantaged under the Federal DBE Program. If the agency determines that firms owned by a racial/ethnic/gender group specified in the DBE Program suffer discrimination in the local transportation marketplace, the agency should include that group as eligible for the race-conscious program elements the agency identifies as necessary, such as DBE contract goals.²

¹ 49 CFR Section 26.51

² If there are no DBE groups for which race-conscious programs should apply, ODOT would project 100 percent raceneutral implementation of the Federal DBE Program.

At the time of this study, several state DOTs such as Colorado, California and Oregon have received waivers from USDOT to limit race-conscious program elements to a subset of the DBE groups eligible for certification under the Federal DBE Program.

USDOT guidance concerning how transportation agencies should project the neutral/race-conscious division of their overall annual DBE goals includes the following:

- USDOT Questions and Answers about 49 CRF Part 26 addresses factors for federal aid recipients to consider when projecting the portion of their overall annual goal they will meet through raceand gender-neutral means.3
- USDOT "Tips for Goal-Setting" also suggests factors to consider when making such projections.4
- FHWA's template for how it considers approving state DOTs' DBE goal and methodology submissions includes a section on projecting the percentage of the overall annual DBE goal to be met through neutral and race-conscious means. An excerpt from this template is provided in Figure IX-1.

Based on 49 CFR Part 26 and the above sources.

general areas of questions that transportation agencies might ask in performing this analysis include:

- A. What has been the past experience of the agency in meeting its overall annual DBE goal? Does the agency have a history of not meeting or exceeding its overall annual DBE goal?
- B. What has DBE participation been when the agency did not apply contract goals (or other race-conscious remedies)?
- C. What is the extent and effectiveness of race-neutral efforts that the agency could have in place for the next fiscal year? What new neutral efforts are ready for immediate implementation?

You must also explain the basis for the State's race-neutral/race-conscious division and why it is the State's best estimate of the maximum amount of participation that can be achieved through race-neutral means. There are a variety of types of information that can be relied upon when determining a recipient's raceneutral/race-conscious division. Appropriate information should give a sound analysis of the recipient's market, the race-neutral measures it employs and information on contracting in the recipient's contracting area. Information that could be relied on includes: the extent of participation of DBEs in the recipient's contracts that do not have contract goals; past prime contractors achievements; excess DBE achievements over past goals; how many DBE primes have participated in the state's programs in the past; or information about state, local or private contracting in similar areas that do not use contracting goals and how many minority and women's businesses participate in programs without goals.

Source: FHWA, Explanation for Approval of [State] DBE Program Goal Setting Process for FY[Year]. http://www.fhwa.dot.gov/civilrights/ dbe memo a4.htm

BBC RESEARCH & CONSULTING

Figure IX-1. **Excerpt from Explanation of** Approval of [State] DBE Goal Setting **Process for FY [Year]**

See http://www.dotcr.ost.dot.gov/Documents/Dbe/49CFRPART26.doc

⁴ http://www.osdbu.dot.gov/DBEProgram/tips.cfm

⁵ USDOT guidance suggests evaluating certain DBE participation as prime contractors if the DBE contract goals did not affect utilization, as prime contractors and subcontractors for agency contracts without DBE goals, and overall utilization for other state, local or private contracting where contract goals are not used.

Section IX is organized around each of these groups of questions and ends with Part D — Other Considerations.

A. What has been the past experience of the agency in meeting its overall annual DBE goal?

BBC examined ODOT's past experience in meeting its overall annual DBE goal, including whether ODOT had a history of not meeting or exceeding its overall annual DBE goal.

ODOT has set an overall annual goal for DBE participation between 8.1 and 8.8 percent from FY 2005 through FY 2009. ODOT's measurements of DBE utilization indicated levels within 1 percentage point of the annual goal for three of these five fiscal years. In FY 2008, utilization exceeded the goal by 3.6 percentage points, and in FY 2009, utilization fell 1.6 percentage points below the goal. Figure IX-2 presents DBE goals for each year and ODOT's reported DBE attainment for each year.

Figure IX-2.

ODOT-reported DBE attainment and annual DBE goal, by fiscal year

Fiscal year	DBE attainment	Annual DBE goal	Difference
2005	8.1 %	8.8 %	(0.7) %
2006	9.5	8.5	1.0
2007	8.3	8.1	0.2
2008	11.7	8.1	3.6
2009	7.2	8.8	(1.6)

Note: Numbers rounded to nearest tenth of 1 percent.

Source: Oklahoma Department of Transportation, Disadvantaged Business Enterprise (DBE) Program Goal on Federally-assisted Projects for Federal Fiscal Year 2010

BBC independently measured DBE utilization based on more complete information than what was contained in past ODOT DBE utilization reports (see Section V of this report). According to BBC's analyses, DBEs obtained 8.0 percent of the FHWA-funded contract dollars that ODOT awarded between July 2004 through June 2009.

Based on this information, it does not appear that ODOT fell substantially short of its past overall annual DBE goals nor does it appear that the agency exceeded them.

B. What has DBE participation been when ODOT has not applied contract goals (or other race-conscious remedies)?

DBE participation that is projected to result from neutral programs should be counted as such when projecting the portion of the overall annual DBE goal that could be met through neutral means. Further, any time a DBE wins a prime contract or subcontract through customary competitive purchasing procedures (i.e., the firm is not placed at an advantage because of a DBE goal), that DBE utilization can also be considered as race-neutral participation.

BBC examined results of the utilization and disparity analyses and other research in this study to review participation of minority- and women-owned firms when race-conscious programs did not apply during the study period.

The following discussion presents results for:

- 1. Engineering-related contracts;
- 2. Construction contracts;
- 3. Combined construction and engineering-related contracts; and
- 4. Projection if ODOT makes an upward step 2 adjustment.
- **1. Engineering-related contracts.** ODOT should review the full body of evidence in this report and other information it may have when determining the extent to which it must use neutral measures to encourage utilization of minority- and women-owned firms on its FHWA-funded engineering and other professional services contracts. It should also consider whether all DBE groups or only certain groups are eligible to participate in any race-conscious measures for these contracts.

Summary of the evidence in the disparity study. Information concerning ODOT engineering-related contracts includes the following.

- There were substantial disparities between MBE/WBE utilization and availability for ODOT engineering-related contracts.
 - The study team observed substantial disparities for African American-, Asian-Pacific American-, Subcontinent Asian American-, Hispanic American- and Native American-owned firms and WBEs.
 - Statistical simulations suggest that chance in contract/subcontract awards can be rejected as a cause of disparities found for MBE/WBEs overall (observed disparities are statistically significant).
 - ➤ BBC identified disparities in MBE/WBE utilization for both engineering prime contracts and subcontracts. ⁶
 - Section VII presents quantitative and qualitative evidence that MBE/WBEs, on average, do not have the same success as majority-owned firms when seeking ODOT engineering-related prime contracts.
 - ➤ Until recently, ODOT was not implementing any race-conscious measures such as DBE contract goals for FHWA-funded engineering-related contracts. Although not part of the study period, BBC's review of late 2009 and 2010 engineering-related contracts that included DBE contract goals indicated that DBE goals have had some positive effect on MBE/WBE utilization.
- The engineering and related professional services firms that are prime consultants and subconsultants on ODOT engineering-related contracts come from the Oklahoma engineering marketplace. There is evidence of disparities in the Oklahoma marketplace related to business success for minorities and women in the local engineering industry. Few or no race-conscious programs apply when assessing these outcomes in the local marketplace.

⁶ Including small prime contracts.

One analytical framework to making a race-neutral projection for engineering-related contracts. If all of its annual DBE goal cannot be met solely through neutral means, ODOT will need to project the portion of its overall annual goal to be met through neutral means. If a projection is needed, ODOT might find the analytical approach presented in Figure IX-3 useful.

The results discussed below pertain to combined FHWA- and state-funded engineering and other professional services contracts. The lower part of Figure IX-3 presents calculations pertaining to the engineering-related portion of the base figure of ODOT's overall annual DBE goal:

- Availability of current and potential DBEs for engineering-related contracts is 16.2 percent, as shown in Column (a) of Figure IX-3.
- Without contract goals or any other race-conscious measures, utilization of minority-and women-owned firms on ODOT engineering-related contracts was 22 percent of what would be expected based on availability for those contracts, as shown in column (b) of Figure IX-3. ODOT did not use race- or gender-conscious measures on any of those contracts. The disparity index reflects results for MBE/WBEs achieved through neutral means.
- Figure IX-3 multiplies engineering-related availability by the disparity index to produce a value of 3.6 percentage points as shown in Column (c). The difference between the engineering-related component of the base figure and the percentage projected through neutral means would be the part of the base figure projected to be achieved through race-conscious program elements. Using the numbers in Figure IX-3 as an example, the projection of race-conscious for engineering-related contracts is 12.6 percentage points.

Figure IX-3.

An analytical framework to calculating percentage of base figure projected to be achieved through neutral means (if no Step 2 adjustment)

Current availability of potential DBEs	a. Current availability	b. Disparity index for ODOT contracts*	c. Portion met through neutral	d. Industry- weighted portion*
Construction				
African American	0.3 %	1	0.0 %	
Asian-Pacific American	0.0	0	0.0	
Subcontinent Asian American	0.0	100+	0.0	
Hispanic American	0.7	6	0.0	
Native American	4.0	100+	4.0	
White women	4.0	100+	4.0	
Total	9.0 %		8.0 %	7.6 %
Engineering				
MBE/WBE	16.2 %	22	3.6 %	0.2 %
Total*	9.3 %			7.8 %

Note: V

Values in Figure IX-3 to be determined by ODOT when actually projecting the portion of the base figure to be achieved through neutral means.

Source: BBC Research & Consulting.

^{*} Applies 95% weight to results for construction and 5% weight to results for engineering-related contracts based on July 2004–June 2009 distribution of work.

The values in Figure IX-3 are based on MBE/WBE utilization that ODOT achieved with current neutral programs. This is just one of the considerations as ODOT develops its projection of the portion of its overall annual DBE goal to be achieved through neutral means.

2. Construction contracts. As with engineering-related contracts, ODOT should review the full body of evidence in this report and other information it may have concerning construction contracts when determining what portion of its overall annual DBE goal it can achieve through neutral means and, if race-conscious measures are required, to which DBE groups they should apply. The top portion of Figure IX-3 provides one analytical framework for examining construction contracts.

African American-, Asian-Pacific American- and Hispanic American-owned construction firms. Disparity analyses indicate disparities for African American-, Asian-Pacific American- and Hispanic American-owned firms on ODOT state-funded construction contracts (for which DBE contract goals did not apply).

- There were substantial disparities for African American-, Asian Pacific American- and Hispanic American-owned firms on state-funded ODOT construction contracts.
- Prime contractors and subcontractors performing ODOT construction contracts predominantly come from the Oklahoma construction industry, where contract goals typically do not apply outside ODOT work. There is evidence of disparities in the Oklahoma construction industry related to business receipts for African American- and Asian American-owned construction firms.

Native American- and white women-owned construction firms. Participation of Native American- and white women-owned businesses in ODOT state-funded construction contracts — which did not include DBE goals —was higher than expected based upon the availability of these firms for ODOT contracts.

Subcontinent Asian American-owned firms. Due to the small size of the Subcontinent Asian American population in Oklahoma, analysis of marketplace conditions for this group was limited. Similarly, because the availability of Subcontinent Asian American-owned construction firms is small, it is difficult to reach conclusions concerning the low utilization that the study team observed for that group in ODOT construction contracts. As a result, there was no evidence of disparities in the participation of Subcontinent Asian American-owned firms in ODOT construction contracts.

One approach to a race-neutral projection for construction contracts. When determining the percentage of its overall annual DBE goal that can be met through neutral measures, ODOT might consider the disparities for African American-, Asian-Pacific American- and Hispanic American-owned firms.

⁷ There were disparities in business receipts for Asian American-owned construction firms, which include Subcontinent Asian American-owned businesses.

Figure IX-3 presents availability and disparity results for minority- and women-owned construction firms. Results for African American-owned firms indicate that:

- African American-owned firms comprise 0.3 percentage points of the base figure for the overall annual DBE goal for construction contracts. Column (a) of Figure IX-3 presents the portion of the base figure represented by each DBE group.
- The disparity index is 1 for African American-owned firms on ODOT construction contracts without DBE goals (i.e., state-funded contracts). ODOT might consider this type of information per the federal regulations 49 CFR 26.51 as part of its determination of what portion of its overall goal may be achieved using race-neutral means of facilitating DBE participation. Column (b) of Figure IX-3 shows the disparity index for each DBE group.
- The disparity index of 1 for African American-owned firms on state-funded contracts suggests that almost none of the ODOT's overall utilization of African American-owned firms on its construction contracts was achieved through neutral means. Column (c) of Figure IX-1 shows this result. It is calculated by multiplying Column (a) results by Column (b) results.

Figure IX-3 also shows similar calculations for Hispanic American- and Asian-Pacific American-owned firms.

Using the same analytical framework, the participation of Native American-, Subcontinent Asian American- and white women-owned firms on ODOT construction contracts achieved through neutral means might equal the portion of the base figure pertaining to these groups of firms.

Using the analytical framework in Figure IX-3, neutral measures might achieve utilization equal to 8 percentage points of the 9 percent base figure for ODOT construction contracts. As with the analysis for engineering-related contracts, ODOT would still need to consider other information, including possible expanded or additional neutral measures that might increase this percentage. (Part C of this section discusses additional neutral measures that ODOT might consider.)

- **3. Combined construction and engineering-related contracts.** Because ODOT will need to project the portion of its overall annual DBE goal to be met through neutral means (combining the projections for construction and for engineering-related contracts), Column (d) of Figure IX-3 shows results for construction and engineering after weighting based on the total dollars for each industry during the study period (95% and 5% weights, respectively, based on dollars of FHWA-funded construction- and engineering-related contracts).
- After weighting, Figure IX-3 shows 7.8 percentage points of the 9.3 percent base figure (or, 83% of the base figure) achieved through neutral means.
- In this example, ODOT would calculate the portion to be achieved through race-conscious measures by subtracting the neutral projection (7.8 percentage points) from the base figure (9.3%), which equals 1.5 percentage points.

Because IX-3 is just an example of an analytical framework, the values presented here are only for illustration. ODOT might use the analytical framework as part of its determination of what portion of its overall goal may be achieved using race-neutral means of facilitating DBE participation.

4. Analytical framework with step 2 adjustment. Figure IX-3 provides an example of an analytical framework using an overall annual DBE goal of 9.3 percent (base figure). As described in Section VIII, ODOT will assess whether to make a step 2 adjustment when establishing an overall annual DBE goal. If ODOT were to make an upward step 2 adjustment as described in Section VIII, it might use a similar analytical framework as presented in Figure IX-3 when projecting the portion of its overall annual DBE goal that would be achieved through neutral means.

Engineering-related contracts. Figure IX-4 shows how an upward step 2 adjustment for engineering-related contracts could affect ODOT's projections of the portion of the goal achieved through neutral means.

- With an upward step 2 adjustment, ODOT's base figure for engineering-related contracts would increase from 16.2 percent to 23.6 percent. That result is calculated in Section VIII of the report and is presented in column (a) of Figure IX-4.
- As shown in column (b) of Figure IX-4, increasing the engineering portion of the goal through an upward step 2 adjustment might mean that a larger portion of the goal would be met through race-conscious program elements. For purposes of illustration, Figure IX-4 shows 20 percentage points, or 85 percent of adjusted DBE availability for engineering, projected to be achieved through race-conscious means.

Figure IX-4.

An analytical framework to calculating percentage of base figure projected to be achieved through neutral means (with Step 2 adjustment)

Availability of potential DBEs after step 2 adjustment	a. Availability	b. Portion met through neutral	c. Industry- weighted portion**
Construction			
African American	0.5 %	0.0 %	
Asian-Pacific American	0.0	0.0	
Subcontinent Asian American	0.0	0.0	
Hispanic American	1.1	0.0	
Native American	4.5	4.5	
White women	6.2	6.2	
Total	12.4 %	10.7 %	10.2 %
Engineering			
MBE/WBE	23.6 %	3.6 %	<u>0.2</u> %
Total**	12.9 %		10.4 %

Note: Values in Figure IX-3 to be determined by ODOT when actually projecting the portion of the base figure to be achieved through neutral means.

Source: BBC Research & Consulting.

^{*} For construction, reflects index for state-funded contracts; for engineering, reflects index for all contracts.

^{**} Applies 95% weight for construction and 5% weight for engineering-related contracts based on July 2004–June 2009 distribution of work.

Construction contracts. Figure IX-4 separately considers African American- and Hispanic American-owned firms; Asian-Pacific American- and Subcontinent Asian American-owned firms; and Native American- and white women-owned firms.

- With an upward step 2 adjustment, the portion of the overall annual DBE goal pertaining to African American and Hispanic-owned construction firms would be higher (for calculations, see Section VIII).
- No step 2 adjustment was necessary for the availability of Asian-Pacific American- and Subcontinent Asian American-owned firms. Calculations for these two groups are the same in Figures IX-3 and IX-4.
- Based on the calculations in Section VIII, a step 2 adjustment would increase the availability of Native American- and white women-owned firms by 2.7 percentage points. Combined utilization of Native American-owned firms and WBEs exceeded availability of these two groups on ODOT's state-funded construction contracts by 6.5 percentage points (see Figure K-7 in Appendix K). In the example provided in Figure IX-4, neutral measures are projected to meet the entire construction-related portion of the goal for these groups. ⁸ Column (c) shows this result.

Combined construction and engineering-related contracts. For purposes of illustration, Column (c) of Figure IX-4 shows a projection of 10.4 percentage points that might be achieved through neutral measures. If ODOT chooses to establish an overall annual DBE goal after making a step 2 adjustment, it might use the analytical framework described here (but not necessarily the values in Figure IX-4) to make its projection of the portion of the goal achieved through neutral means.

C. What is the extent of race-neutral efforts that the agency could have in place for the next fiscal year?

BBC reviewed a broad range of potential neutral measures that ODOT might consider for future implementation. There may be a number of reasons why certain measures are not practicable, and there could be neutral remedies in addition to those discussed here that ODOT might consider.

1. Current ODOT neutral programs. ODOT currently implements a broad range of neutral measures to increase MBE/WBE participation in its FHWA- and state-funded contracts. Based on interviews with staff, the study team learned that ODOT plans to continue these neutral measures in the future. In addition to ODOT, many other national and local organizations implement small business development programs in Oklahoma.

⁸ However, there could be a point at which the step 2 adjustment for these two groups would be so large as to require race-conscious measures for these groups to meet the overall DBE goal. Also, because the amount of step 2 adjustment for WBE construction availability was much larger than for Native American-owned firms, ODOT might choose to project a portion of the WBE construction component of the adjusted goal to be met through race-conscious measures. If so, it would include women-owned DBEs in the race-conscious program elements for FHWA-funded construction contracts.

Figure IX-5 lists examples of neutral measures provided in 49 CFR Section 26.52(b). ODOT already is implementing most of these types of measures. Appendix J summarizes some of ODOT's and others' neutral programs in the state.

Figure IX-5.

Examples of neutral measures listed in federal regulations

Arranging solicitations, times for the presentation of bids, quantities, specifications, and delivery schedules in ways that facilitate DBE, and other small businesses, participation (e.g., unbundling large contracts to make them more accessible to small businesses, requiring or encouraging prime contractors to subcontract portions of work that they might otherwise perform with their own forces).

Providing assistance in overcoming limitations such as inability to obtain bonding or financing (e.g., by such means as simplifying the bonding process, reducing bonding requirements, eliminating the impact of surety costs from bids, and providing services to help DBEs, and other small businesses, obtain bonding and financing).

Providing technical assistance and other services.

Carrying out information and communications programs on contracting procedures and specific contract opportunities (e.g., ensuring the inclusion of DBEs, and other small businesses, on recipient mailing lists for bidders; ensuring the dissemination to bidders on prime contracts of lists of potential subcontractors; provision of information in languages other than English, where appropriate).

Implementing a supportive services program to develop and improve immediate and long-term business management, record keeping, and financial and accounting capability for DBEs and other small businesses.

Providing services to help DBEs, and other small businesses, improve long-term development, increase opportunities to participate in a variety of kinds of work, handle increasingly significant projects, and achieve eventual self-sufficiency.

Establishing a program to assist new, start-up firms, particularly in fields in which DBE participation has historically been low.

Ensuring distribution of the DBE directory, through print and electronic means, to the widest feasible universe of potential prime contractors.

Assisting DBEs, and other small businesses, to develop their capability to utilize emerging technology and conduct business through electronic media.

Source: 49 CFR Section 26.51(b)

2. Additional neutral programs for consideration. There are several other neutral program elements ODOT might consider, as discussed below. BBC assessed how quickly these initiatives might be put in place and the extent of their impact, if implemented.

Potential neutral initiatives include:

- Subcontracting minimum program;
- Small business subcontracting program;
- Small business program for prime consultants;
- Segmentation of large contracts into small contracts;

- Consultant qualifications evaluation system;
- Prequalification of construction prime contractors;
- Prompt payment of subcontractors;
- Construction contractor assistance program;
- General communications and outreach, including notification of bid opportunities;
- Data collection;
- Business credit programs;
- Bonding programs;
- Business insurance assistance; and
- Other assistance.

Subcontracting minimum. ODOT might consider a measure that would encourage more subcontracting on ODOT contracts. Even without DBE contract goals, the share of ODOT subcontracts that goes to MBE/WBEs is greater than the share of ODOT prime contracts (see Section VII).

DBE contract goals appear to be effective in encouraging subcontracting. Thirty percent of FHWA-funded construction contract dollars went to subcontractors compared with only 18 percent for state-funded contracts. Subcontracts represented 16 percent of engineering and other professional services contracts (for which contracting goals did not apply during the study period; see Section VII).

A subcontracting minimum program might increase the amount of subcontractor participation beyond the average for state-funded construction contracts. ODOT might consider an initiative similar to the City of Los Angeles' Mandatory Subcontracting Minimum (MSM) program.

- For each contract above a certain dollar amount, ODOT would set a percentage to be subcontracted based on an analysis of the work to be performed and past experience with similar contracts (different types of projects would involve greater or smaller amounts of subcontracting). For some contracts, ODOT could set no MSM.
- Prime contractors bidding on the contract would need to subcontract a percentage of the work
 equal to or exceeding the minimum for their bids to be deemed responsive.
- The program would need to be flexible, including the opportunity for the prime contractor to request a waiver (preferably before time of bid so that the waiver would apply to each prime).

An MSM program corresponds to a neutral remedy listed in the Federal DBE Program, which suggests that agencies could promote participation of all small businesses, including MBE/WBEs, by "requiring or encouraging prime contractors to subcontract portions of work that they might otherwise perform with their own forces."

ODOT would need to consider whether the program described here is permitted under local and state law.

Small business subcontracting program. ODOT might consider implementing a program to include subcontracting goals for certified small businesses. ODOT might set goals and evaluate contractor compliance using the same processes provided in the Federal DBE Program.

To use such a program, ODOT would need to develop a small business certification program. ODOT might use the same economic eligibility criteria for small business certification as found in the Federal DBE Program, except that race/ethnicity/gender of ownership would not be considered (transportation agencies such the Los Angeles County Metropolitan Transportation Authority currently employ this approach).

If ODOT chose to continue to set DBE contract goals, ODOT could test a subcontracting minimum program or a small business subcontracting program in combination with its DBE contract goals. The DBE contract goals would be a race-conscious remedy and the small business goals or MSM would be a neutral remedy. ¹⁰

USDOT has considered how a small business program may be appropriately implemented as part of the Federal DBE Program.¹¹

- The program must be authorized under state law;
- Certified DBEs that meet the size criteria established under the program are presumptively eligible to participate in the program;
- There are no geographic preferences or limitations imposed on the program as applied to FHWA-funded contracts (i.e., no local preference and that small businesses outside Oklahoma could apply for and participate in the program);
- There are no limits on the number of contracts awarded to firms participating in the program but that every effort will be made to avoid creating barriers to the use of new, emerging, or untried businesses; and
- Steps will be taken to encourage those minority and women owned firms eligible for DBE certification to become certified.

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⁹ 49 CFR Section 26.51 (b) (1).

For example, if ODOT decided to implement race-conscious elements, it might set a 30 percent subcontracting minimum on a contract, or a 20 percent goal for small business participation, and on the same contract also set a 1 to 2 percent DBE contract goal that could be met by certain DBE groups. In this example, ODOT would follow its current procedures for implementing the DBE contract goal, including the good faith efforts portion of the program.

Official Questions and Answers. http://www.osdbu.dot.gov/DBEProgram/dbeqna.cfm#26.21(b).

ODOT would need to consider whether the program described here is permitted under local and state law.

Small business program for prime consultants. ODOT might also evaluate whether it could implement a program to help certified small businesses obtain prime contracts.

■ Evaluation points for small businesses competing for professional services contracts. Similar to the State of California's small business program, ODOT might consider employing small business preferences for certain types of contracts to the extent that law permits. For example, in evaluating proposals for professional services contracts, ODOT might be able to include 5 evaluation points out of 100 to be awarded based on certified small business status.

This program may be effective in encouraging small consultants, including minority-and women-owned firms, to compete for ODOT engineering and other professional services contracts. It may also increase small businesses' chances of being short-listed and then winning ODOT engineering and other professional services work. Section VII explains the disadvantages for small businesses, including MBE/WBEs, in competing for ODOT contracts.

■ Sheltered market for small contracts. To the extent permitted by law, ODOT could consider employing a sheltered market program for small contracts that are not legally required to be publicly bid. For example, program participants certified as small businesses would be able to compete amongst themselves for contracts as the lowest bidder. A dollar threshold would be established by the Department and projects under that threshold could be considered for the program.

The sheltered market program may help encourage all small businesses, including minority- and women-owned firms, to compete for smaller ODOT construction contracts by limiting the competition to similar sized firms. This measure may give businesses access to new prime and subcontracting opportunities. ODOT would need to develop a small business certification program as a part of this effort.

Segmentation of large contracts into smaller contracts. ODOT should continue to evaluate when contracts can be divided into multiple, smaller contracts. However, barriers to participation for certain DBE groups appear to span contract size, as discussed in Section VII.

The percentage of ODOT dollars going to minority- and women-owned firms working as prime consultants was substantially higher for small, engineering-related contracts, so segmenting professional services work into smaller contracts may be beneficial. However, disparities between utilization and availability of MBE/WBEs as prime consultants nonetheless persisted for small engineering-related contracts (see Section VII).

Consultant qualifications evaluation system. BBC's review of MBE/WBE consultants' success in competing for ODOT engineering-related contracts found evidence that participation was impacted due to the design and application of evaluation criteria when reviewing consultant qualifications. The current process appears to favor firms that already have considerable experience performing ODOT

contracts. This practice may have the effect of perpetuating disparities in the use of minority- and women-owned prime consultants. ODOT should review process design and how evaluators implement the qualifications review system.

One of the changes ODOT should review is to create an evaluation category that explicitly considers the contract dollars a consultant currently has with ODOT and to award evaluation points to consultants with less or no current work (and zero points to the proposer with the most current work). BBC has experience with other public agencies that have successfully implemented this addition to the evaluation process. As with other neutral measures, ODOT should consider whether this change would be permitted under state law.

Prequalification for construction prime contractors. ODOT should review its prequalification procedures to ensure that they do not act as barriers to smaller and newer firms and firms that have less past success in receiving ODOT contracts. There are aspects of the prequalification process that may perpetuate disparities for African American-, Asian-Pacific American- and Hispanic American-owned firms, which have been relatively unsuccessful in obtaining ODOT construction prime contracts.

ODOT should review its practice of prequalifying based on type of work *and* prequalifying for the dollars of work performed. Because bonding is required for larger ODOT contracts, its practice of prequalifying for dollars of work performed may represent an unnecessary barrier for smaller contractors and contractors that have less past success in receiving ODOT contracts. Section VII of the report explains how this aspect of ODOT prequalification may affect certain groups of firms.

Prompt payment of subcontractors. ODOT requires prime contractors to pay all subcontractors for satisfactorily completed work no later than 30 days after receipt of payment from ODOT. Other states have even shorter requirements. ¹² ODOT might consider a policy of payment within 10 or 15 days for satisfactorily completed work.

Construction contractor assistance program. Businesses that the study team interviewed discussed the lack of construction-specific assistance available in the marketplace. Businesses were typically pleased with the general business and entrepreneurial technical assistance available at the Small Business Development Centers and other resource centers, but identified a gap in the availability of construction-specific guidance. ODOT might consider partnering with or funding an outside agency training center or trade association to host a construction contractor assistance program center. The center would be staffed by individuals who have worked in the construction industry and understand the unique challenges and demands of the industry.

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For example, the Illinois State Prompt Payment Act (30 ILCS 540) requires payment of subcontractors within 15 days of receipt of corresponding payment by the state. Also, subcontractors can determine when payments have been made to prime contractors because notice of each payment is electronically posted. See http://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=539&ChapAct=30%26nbsp%3BILCS%26nbsp%3B540%2F&Chapte rID=7&ChapterName=FINANCE&ActName=State+Prompt+Payment+Act%2E.

The construction contractor assistance program would be open to all firms, regardless of race or gender. Additionally, assistance opportunities would be tailored specifically to the needs of the construction industry and might include:

- Estimating;
- Project identification & matching;
- Bid preparation;
- Management assistance;
- Finance and accounting;
- Training in use of computers and the internet; and
- Introduction training in industry software.

General communications and outreach, including notification of bid opportunities. The study team examined ODOT communications with DBEs and other firms, especially in how ODOT notifies firms of opportunities to submit bids and proposals. Firms that the study team interviewed generally complimented ODOT on its efforts to make bidding opportunities known to potential bidders. ODOT might consider certain improvements to the process.

- A number of people interviewed in the disparity study suggested that ODOT could improve what it communicates and increase the frequency of communications with DBEs and other contractors. One opportunity is to change the quarterly DBE electronic newsletter to a monthly newsletter.¹³
- ODOT might ask contractors and consultants to review the ODOT website and make revisions to better communicate how to do business with the Department. For example, some contractors have suggested that the website might better identify ODOT staff to contact about bid opportunities.
- To encourage increased participation in outreach events, seminars and other opportunities, ODOT could consider hosting events at times that are accessible for all business levels and sizes. For example, early mornings, evenings and weekends might be options for ODOT to consider when scheduling such events. ODOT might identify ways to improve its process of inviting firms to seminars, meetings and conferences in order to increase participation in those events.
- A Hispanic trade association that the study team interviewed as part of this study recommended that ODOT provide more outreach to the Hispanic community and that communications be bilingual.

¹³ Idaho Transportation Department's DBE newsletter is one example. It can be found at http://itd.idaho.gov/civil/dbeforms.htm.

Data collection. BBC was able to collect subcontractor data for ODOT professional services through extensive survey efforts. For future studies and evaluation, ODOT should consider improving its data collection and tracking for professional services. Efforts should be made to address the following:

- Collect subcontractor utilization data for firms regardless of race, gender or certification status;
- Collect invoices for prime and subcontractors and consultants;
- Establish a training process for all staff who are responsible for managing and entering contract data. Training should convey data entry rules and standards, and ensure consistency in the data entry process; and
- Consider requiring firms to report their subcontractors' contact information and awarded dollar amounts at time of contract.

Although subcontractor data were available for construction projects, ODOT may consider using the above recommendations to review their tracking and data collection process.

Partnerships with trade associations and other government agencies. Several minority and female business owners whom the study team interviewed suggested that there is a history of distrust of ODOT by some MBE/WBEs. ODOT joining or partnering with local organizations, trade associations and other government agencies could aid the overall visibility and credibility of the Federal DBE Program in Oklahoma.

- Public agency consortium. ODOT might also consider initiating a consortium of public agencies that would jointly host quarterly outreach and networking events and training sessions for businesses seeking public sector contracts.
- Trade association memberships. ODOT might consider efforts to build stronger relationships in the local communities with business organizations and trade associations. Partnerships with these organizations could offer an alternative avenue for business training, outreach and technical assistance. Organizations and trade associations to consider include:
 - ➤ Capitol Chamber;
 - ➤ The Greater Oklahoma City Hispanic Chamber of Commerce;
 - ➤ The American Indian Chamber of Commerce;
 - > The Association of General Contractors of America; and
 - ➤ The Consortium for Minority Business Development.

Training partnerships with private firms. Similar to the San Diego Airport Authority's role as host to the Turner School of Construction Management, ODOT might consider partnering with a large construction or engineering firm to host a construction management or engineering course. The multi-week course would be designed to improve the technical, administrative and managerial skills of small businesses. The course would be facilitated by industry professionals from the partnering firms.

Business credit programs. The disparity study identified disparities in access to capital for certain minority groups (see Section III for a summary). Some of the local programs to assist DBEs and other small businesses are described in Appendix J. ODOT could explore ways to better connect its contractors and consultants with available programs, including equity capital and long-term loans provided through Small Business Investment Companies in Oklahoma. ¹⁴

Bonding programs. Section III of the report summarizes barriers for MBE/WBEs in obtaining bonding. ODOT might explore how it could better match small firms that require bonding assistance with the local resources available to provide that assistance. Appendix J describes some of these programs, including Small Business Administration and USDOT programs. Additional opportunities include:

- The USDOT Office of Small and Disadvantaged Business Utilization (OSDBU) and the Surety and Fidelity Association of America have partnered to develop a 10-week training course that prepares small contractors to obtain bonding. Businesses completing the training are paired with bonding specialists to help the companies obtain bonds. DOOT might explore whether it could bring the OSDBU program to Oklahoma or adapt the program and implement it in the state.
- Some transportation agencies such as the San Diego County Regional Airport Authority have created programs to directly provide bonding to small companies bidding on agency contracts.
- Some state DOTs, such as the North Carolina Department of Transportation, waive bonding requirements for smaller contracts.

Business insurance assistance. Business insurance is required to work on most ODOT construction and engineering-related contracts. Information from the study team's in-depth personal interviews indicated that minority- and women-owned firms may face barriers in the Oklahoma insurance market. As with bonding, ODOT could explore more ways to explain how to obtain needed insurance and ensure that small contractors and consultants have access to business insurance experts.

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¹⁴ See http://www.sba.gov/financialassistance/borrowers/vc/sbainvp/index.html.

¹⁵ See http://osdbu.dot.gov/bap/bep.cfm.

Summary. ODOT could explore a broad array of new and expanded neutral means for implementation in the future. Some of these changes might be made quickly and require minimal resources. If ODOT chose to implement these measures after fully researching them, and if permitted by local or state law, the time required to implement the following measures might be less than a year:

- Establish a subcontracting minimum program;
- Enhance its consultant qualifications evaluation system for engineering-related and other professional services contracts;
- Revise how it prequalifies prime contractors for construction contracts;
- Enact changes in its prompt payment policy;
- Begin an improved data collection process;
- Initiate partnerships with trade associations and other government agencies; and
- Take steps to better encourage DBEs to take advantage of programs currently available in Oklahoma.

Other neutral measures would require additional time and resources to implement after full ODOT consideration. For example, any programs that would encourage participation of certified small businesses would require ODOT to establish new programs and certification procedures and allow time to advertise, accept and evaluate certifications. Program development and up-front implementation of these types of programs might require more than 12 months.

ODOT's projection of the portion of its overall DBE goal that could be achieved through neutral means should include the extent to which it has implemented additional neutral measures or has concrete plans to do so. ODOT's projections should also take into account the timing of programs.

- The neutral measures discussed above will affect state-funded as well as FHWA-funded contracts.
- ODOT should track utilization of MBE/WBEs and certified DBEs on its state-funded engineering and construction contracts, consistent with the utilization analyses in this disparity study.
- If, after implementation of any additional neutral remedies, ODOT observes improvements in utilization for certain racial/ethnic/gender groups on state-funded contracts (in comparison to the availability of these groups for such contracts), it might change its projection of how much of the overall annual DBE goal can be achieved through neutral means in future years.
- The analytical framework presented in Figures IX-3 and IX-4 might be useful in making these projections.

D. Other Considerations

Adjustments as ODOT implements the Federal DBE Program. ODOT will need to monitor the effectiveness of race-conscious and race-neutral measures during the course of an entire fiscal year. ¹⁶

- Before the fiscal year is complete, ODOT might find that DBE utilization on FHWA-funded contracts will substantially exceed its overall DBE goal within the fiscal year. It might choose to adjust the extent to which it uses race-conscious measures if this outcome occurs.
- Similarly, ODOT might reach a mid-year decision to increase the extent to which it
 uses race-conscious remedies if it finds that the programs in place are not effective.

Firms potentially eligible for DBE certification. The Federal DBE Program requires ODOT to prepare DBE utilization reports based on firms actually certified as DBEs.¹⁷ However, many of the minority- and women-owned firms examined in this disparity study are not currently certified even though they might be eligible for certification. It is important for ODOT to encourage and facilitate certification for these firms.

The overall annual DBE goal includes minority- and women-owned firms that might be eligible for DBE certification but have not chosen to pursue certification.

- One reason that future DBE utilization may fall below ODOT's overall annual DBE goal is that many of the minority- and women-owned firms doing business with ODOT are not DBE-certified.
- Certain currently-certified DBEs may let their certification lapse if they are no longer eligible to participate in race-conscious programs on FHWA-funded construction contracts.
- For these and other reasons, ODOT should examine factors in addition to its utilization of certified DBEs to evaluate the effectiveness of its programs, as discussed below.

Tracking minority- and women-owned firms that are not currently certified as DBEs.ODOT will need to track the effectiveness of neutral programs for both FHWA- and state-funded contracts, including preparing utilization reports for all minority- and women-owned firms. ¹⁸

- ODOT should use the BBC database developed as part of this study as a starting point for tracking MBE/WBE utilization.
- Firms doing business with ODOT as a prime contractor or subcontractor should be required to complete contractor/consultant registration documents, which should include MBE/WBE ownership information.

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¹⁶ 49 CFR Section 26.51 (f) (2)

¹⁷ See 49 CFR Section 26.55 (f) and 26.87 (i).

¹⁸ Including MBE/WBEs that are self-identified.

- ODOT should collect and report information for prime- and subcontractor utilization on both FHWA- and state-funded contracts.
- Separate reports should be prepared for construction and engineering-related contracts.
- ODOT should also continue to prepare reports on the participation of certified DBEs in FHWA-funded contracts, as required under the Federal DBE Program.

Monitoring changes in the Federal DBE Program. The Federal DBE Program regulations periodically change, and USDOT also issues new guidance concerning implementation of the Program. ODOT should monitor these developments.

Other transportation agencies' implementation of the Federal DBE Program is under review in federal district court. ODOT should continue to monitor relevant court decisions in these and other cases.

SECTION X.

Future Implementation of the Federal DBE Program and Programs for State-funded Contracts

Sections VIII and IX focus on information to assist ODOT:

- Develop its overall goal for DBE participation;
- Project the portion of its overall DBE goal that could be achieved through neutral measures; and
- Consider whether all or only certain DBE groups would be eligible for any raceconscious programs that ODOT might use.

Section X summarizes these DBE Program elements and other requirements of the Federal DBE Program. Section X is organized in two parts:

- A. Federal requirements of implementing the Federal DBE Program; and
- B. Additional program options for ODOT's state-funded contracts.

A. Federal Requirements in Implementing the Federal DBE Program

Regulations in 49 CFR Part 26 and associated guidance, including a sample plan provided by USDOT, provide direction on implementation of the Federal DBE Program. ODOT can build on those program documents and on its current plan.

Plan elements are discussed in the order identified in 49 CFR Part 26. Because only certain portions of the Federal DBE Program are discussed below, ODOT should refer to the complete federal regulations when considering its implementation of the Program.

Reporting to DOT — **49 CFR 26.11 (b).** ODOT must periodically report DBE participation to FHWA. BBC's review indicates that, until recently, past utilization reports have not had complete information on DBE subcontractor participation in ODOT's FHWA-funded engineering and related professional services contracts. ODOT should continue to take steps to capture complete information about DBE subconsultants on those contracts.

Bidders list — **49 CFR Section 26.11 (c).** As part of its implementation of the Federal DBE Program, ODOT must develop a bidders list of firms that are available for its contracts.

Meeting the federal requirements. The bidders list must include the following information about each available firm:

- Name;
- Address;
- DBE status;
- Age; and
- Annual gross receipts.

One option for developing the bidders list is to conduct a survey of firms. BBC's availability interviews collected all of the above information for local firms available for ODOT construction and engineering-related prime contracts and subcontracts. BBC recommends that ODOT use the availability database for its bidders list per 49 CFR Section 16.11 (c).

Maintaining a mailing/contact list of firms interested in ODOT work. As part of its evaluation of prequalification requirements for construction contracts, ODOT may want to consider developing a routine way for firms interested in doing business with ODOT to electronically receive ODOT information and to make their interest known to other contractors.

ODOT now makes prequalification lists and planholders lists for construction contracts available on its website, which may be helpful for subcontractors seeking out prime contractors that are bidding on particular projects. ODOT should continue this practice for construction and explore ways to provide equivalent information for engineering and other professional services contracts. The agency currently provides information about letters of interest that prime consultants have submitted on professional services contracts.

Maintaining comprehensive vendor data. In order to effectively track future utilization of minority- and women-owned firms as prime contractors and subcontractors, ODOT will need to improve the information it collects on the ownership status of firms with which it does business. Firm information that BBC collected as part of the disparity study can be a start toward improving ODOT's vendor data.

ODOT might consider implementing a bidder registration program to collect vendor data for all firms bidding on its contracts. Businesses could register with ODOT through an online vendor management system to be notified when bidding opportunities arise in their fields of work. In addition, a bidders list would give ODOT another tool to widely advertise contract opportunities.

Publishing information on bidders/proposers. ODOT's website includes bid tabulations for current and past construction contracts and should continue to do so. ODOT should also consider posting summary results of each stage of its consultant evaluations.

DBE financial institutions — **49 CFR Section 26.27.** Currently, there are eleven financial institutions listed through the Treasury Department as owned and controlled by socially or economically disadvantaged individuals in the Oklahoma marketplace. It appears that ODOT has not used any of those institutions in the past and has not encouraged prime contractors to do so.

ODOT should thoroughly investigate the full extent of services that those financial institutions offer and make reasonable efforts to use them and also encourage their use among prime contractors in accordance with the federal regulations.

Prompt payment mechanisms — **49 CFR Section 26.29.** ODOT currently has a policy that requires prime contractors to pay subcontractors within 30 days of receiving each progressive payment from ODOT, unless for good cause. FHWA has accepted that provision as part of ODOT's implementation of the Federal DBE Program. However, ODOT may want to consider shortening the time allowed for subcontractor payment, to the extent permitted by law, as discussed in Section IX of this report.

DBE Directory — **49 CFR Section 26.31.** ODOT maintains a DBE Directory, which is available on its website. It should continue to do so.

Overconcentration — **49 CFR Section 26.33.** Agencies implementing the Federal DBE Program are required to report and take corrective measures if it finds that DBEs are so overconcentrated in certain types of work as to unduly burden non-DBEs in that type of work. In conducting the disparity analysis, BBC did not identify instances of overconcentration.

Business development programs — **49 CFR Section 26.35.** Business development programs (BDPs) are efforts to assist DBE-certified firms to develop the capabilities to compete outside of the DBE Program. ODOT may want to develop a BDP for DBE-certified firms per the federal regulations. Specialized assistance would be tailored to developing firms and firms in transitional stages of development. This program may be especially needed if ODOT chooses to no longer include certain DBE groups in any race-conscious programs.

The assistance that ODOT would provide to participating DBEs would be specific to the business plan that each firm would develop in conjunction with ODOT. Business plan elements include:

- 1. An analysis of market potential, competitive environment and other business analyses estimating the participant's prospects for profitable operation;
- 2. An analysis of the firm's strengths and weaknesses, with particular attention to the means of correcting any financial, managerial, technical or labor conditions that could impede the participant from receiving contracts outside of the DBE program;
- 3. Specific targets, objectives and goals for the participant's business development during the next two years, using the results of the above analyses;
- 4. Estimates of contract awards from the DBE program and from other sources that would be needed to meet the objectives and goals for the years that the business plan would cover; and
- 5. Other information that the participant may require. 1

¹ See Appendix C to Part 26.

The business plan and supporting projections for each firm should be updated at least once a year. To implement business development programs for participating DBEs, ODOT would need to increase its internal and external capabilities to provide specialized technical assistance to construction firms.

A firm could participate in a BDP for multiple years. Indicators that a firm would no longer need assistance include meeting objectives related to profitability, sales, net worth, access to bonding and business credit and other firm capabilities. Firms meeting those objectives would then graduate from the program.

ODOT may also discontinue a firm's participation in the BDP due to a failure of the firm to engage in business practices that would promote its competitiveness within a reasonable period of time.

ODOT's current method of delivery for BDP services is through the Small Business Development Centers (SBDC) and the Oklahoma Bid Assistance Networks (OBAN). ODOT signed a memorandum of understanding (MOU) with these agencies in June 2009 to serve the Department's DBEs in these efforts. Prior to partnering with the SBDC and OBAN, ODOT contracted with a private firm to facilitate their business development program.

Mentor-protégé program – 49 CFR Appendix D to Part 26. As part of the BDP or as a separate component of its implementation of the DBE Program, ODOT might consider developing a mentor-protégé program. A mentor-protégé relationship matches a larger, more experienced mentor with a smaller, less experienced DBE firm that could benefit from training, technical assistance and other services that the mentor would provide. A mentor-protégé program could be one component of the BDP discussed above.

To operate a mentor-protégé program, ODOT would need to design general program guidelines and submit them for FHWA approval. If the program is approved, ODOT could then develop individual development plans for specific mentor-protégé pairs. ODOT might consider working with the local chapter of the Association of General Contractors of America or other organizations to implement the program.

For each mentor-protégé relationship, ODOT could require:

- A written development plan that sets forth the objectives of both parties and their respective roles in the mentor-protégé relationship, the duration of the arrangement and the services and resources that the mentor would provide to the protégé.
- The fees to cover the direct and indirect cost for training and assistance services that the mentor would provide, which may be reimbursable by FHWA.
- A review to ensure that the mentor and protégé are independent business entities according to federal regulations (49 CFR Appendix D to Part 26).

Monitoring the performance of other program participants — 49 CFR Section 26.27.

ODOT has implemented mechanisms to ensure that all DBE program participants comply with necessary provisions and regulations. For example, ODOT has a monitoring and enforcement mechanism to ensure that DBEs actually perform the work that prime contractors and the agency commits to them.

ODOT maintains progress reports on actual DBE utilization (e.g., payments made to DBE firms), and compares that utilization to award commitments. The reports that ODOT sends to FHWA include data for both commitments and payments.

Prohibition of DBE quotas, and prohibition of set-asides for DBEs unless in limited and extreme circumstances — 49 CFR Section 26.43. Although DBE quotas are prohibited, and set-asides are only to be used in extreme circumstances, the Federal DBE Program does allow for implementation of a small business program for firms bidding or proposing as prime contractors. ODOT would need to determine that any such small business program is allowable under state law. ODOT's implementation of such neutral programs would be consistent with the Federal DBE Program.

Setting overall annual DBE goals — 49 CFR Section 26.45. Section VIII of the report uses data and analytical techniques from the disparity study to develop overall annual DBE goals. ODOT should consider adopting that approach as it develops its DBE goals in the future.

On February 3, 2010, USDOT posted a final rule concerning how often agencies that implement the Federal DBE Program are required to submit overall annual DBE goals. Agencies such as ODOT now only need to develop and submit overall annual DBE goals every three years. That change was effective as of March 5, 2010.

Means used to meet overall DBE goal — **49 CFR Section 26.51.** Section IX of the report focuses on information and methods ODOT might use to project the portion of its overall DBE goal that it might be able to meet through neutral means.

Maximum feasible portion of goal met through neutral programs. ODOT must meet the maximum feasible portion of its overall goal through race-neutral means of facilitating DBE participation. Taking this requirement into consideration, ODOT should maintain its current neutral efforts and evaluate and consider using other neutral measures discussed in Section IX.

ODOT must project the portion of its overall DBE goal that could be achieved through neutral means. The agency should consider the information and analytical approaches presented in Section IX when making future projections.

Use of DBE contract goals. The Federal DBE Program requires ODOT to establish contract goals to meet any portion of its overall DBE goal that it does not project being able to meet using race-neutral means, as noted in 49 CFR 26.51(d). Based on this report and all other information and evidence available to ODOT, the Department should consider whether it should utilize contract goals to meet any portion of its overall annual DBE goal that ODOT does not project being able to meet using race-neutral means. If ODOT determines that it needs to establish contract goals, then it should also evaluate which, if any, DBE groups should be considered eligible to participate in any contract goals it determines are appropriate per the federal regulations to use for its construction and engineering contracts.

USDOT guidelines on the use of DBE contract goals include the following:

- Contract goals may only be used on contracts that have subcontracting possibilities.
- Agencies are not required to set a contract goal on every FHWA-funded contract.
- Over the period covered by the overall DBE goal, an agency must set contract goals so
 that they will cumulatively result in meeting the portion of the overall goal that agency
 projects being unable to meet through neutral means.
- An agency's contract goals must provide for participation by all DBE groups eligible for race-conscious measures and must not be subdivided into group-specific goals. This last point is important as ODOT considers which DBE groups, if any, it determines should be eligible for contract goals. If it determines to include specific DBE groups but not others for contract goals, it must submit a waiver request to FHWA. FHWA has approved state DOT implementation of programs that limit participation in DBE contract goals to underutilized DBEs (UDBEs).
- ODOT must maintain and report data on DBE utilization separately for contracts that include and do not include DBE goals.

Good faith effort procedures — 49 CFR Section 26.53. Under the Federal DBE Program, bidders do not have to meet the DBE goal to be awarded a contract. The Program requires agencies to also consider bidders that make good faith efforts to meet the contract goal. USDOT has provided guidance for agencies to review good faith efforts, including materials in Appendix A of 49 CFR Part 26.

ODOT appears to be implementing good faith effort procedures in compliance with the federal regulations. ODOT reported that prime contractors rarely use good faith efforts. ODOT reported only about two bidders annually do not meet contract goals on projects, and that in these instances their good faith efforts are typically valid and approved.

Counting DBE participation toward goals — **49 CFR Section 26.55.** USDOT outlines how agencies implementing the Federal DBE Program should count DBE participation in contracts and evaluate whether a bidder has met the DBE contract goal. USDOT also gives specific guidance for counting participation of different types of DBE suppliers and trucking companies. ODOT appears to have developed and implemented processes to appropriately count DBE participation in its contracts.

DBE certification — **49 CFR Part 26 Subpart D.** ODOT has an operating certification program that attempts to comply with Subpart D of 49 CFR Part 26. It operates the Uniform Certification Program (UCP) for the state of Oklahoma. ODOT should make the following considerations as it continues to operate the UCP:

- If ODOT makes a determination that contract goals are appropriate for specific DBE groups for certain contracts, it should continue to certify all groups included in the Federal DBE Program. For example, if ODOT determines that white women-owned firms are not eligible to participate in contract goals, ODOT should nonetheless maintain its current process for certifying white women-owned firms as DBEs.
- Although the analyses in the disparity study focused on marketplace conditions in Oklahoma, and the study team collected availability information on Oklahoma firms, ODOT would still need to allow firms located outside of the state to be certified as DBEs.
- ODOT should be aware that USDOT is considering by pending notice of rulemaking to increase the size ceilings and personal net worth ceilings for DBE certification.
 ODOT would need to revise its certification forms and processes accordingly.

B. Additional Program Options for ODOT State-funded Contracts

The Federal DBE Program does not pertain to state-funded contracts, nor is there currently any state law that requires ODOT to implement programs to encourage MBE/WBE utilization in state-funded work. ODOT should consider the following options for its state-funded contracts.

Reporting. ODOT should initiate reporting of MBE/WBE and DBE utilization on state-funded contracts using the same methods that it would use for FHWA-funded contracts. That practice will allow ODOT to track how well it is addressing the disparities that BBC found for MBE/WBEs in its state-funded professional services contracts and for certain MBE groups in its state-funded construction contracts. Monitoring utilization and assessing progress in addressing any disparities for state-funded contracts will also help ODOT understand how its neutral programs may be affecting participation in its FHWA-funded contracts.

Bidders list. All of the recommendations included in previous discussions of bidders lists would also pertain to state-funded contracts. Information tools that ODOT develops for FHWA-funded contracts would extend to state-funded contracts.

Business development programs. Any BDPs that ODOT establishes for DBE firms — including mentor-protégé programs — would help those firms be more competitive on FHWA-funded contracts and on state-funded contracts.

Neutral programs. ODOT could consider applying the race-neutral programs identified in Section IX and Section X for its state-funded contracts. One program that may be useful on state-funded contracts, to the extent permitted by state law, would be a small business subcontracting program. All small business enterprises including small white male-owned firms and small minority-and women-owned firms would be eligible for the program. ODOT would need to establish a small business certification process in order to operate such a program.

APPENDIX A. Legal Framework and Analysis

Oklahoma Department of Transportation

HOLLAND & KNIGHT LLP

APPENDIX A OKLAHOMA DOT

REPORT ON LEGAL FRAMEWORK AND ANALYSIS

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APPENDIX A. Legal Framework and Analysis

A. Introduction

In this section Holland & Knight LLP analyzes recent cases regarding the Transportation Equity Act for the 21st Century (TEA-21) as amended and reauthorized ("SAFETEA" and "SAFETEA-LU"), the United States Department of Transportation regulations promulgated to implement the TEA-21 known as the Federal Disadvantaged Business Enterprise ("DBE") Program, and local minority and women-owned business enterprise ("MBE/WBE") programs to provide a summary of the legal framework for the disparity study as applicable to the Oklahoma DOT ("ODOT").

This section begins with a review of the landmark United States Supreme Court decision in <u>City of Richmond v. J.A. Croson</u>. Sets forth the strict scrutiny constitutional analysis applicable in the legal framework for conducting a disparity study. This section also notes the United States Supreme Court decision in <u>Adarand Constructors, Inc. v. Pena</u>, ("<u>Adarand I</u>"), which applied the strict scrutiny analysis set forth in <u>Croson</u> to federal programs that provide federal assistance to a recipient of federal funds. The Supreme Court's decision in <u>Adarand I</u>, provides the basis for the legal analysis in connection with ODOT's participation in the Federal DBE Program.

The legal framework then analyzes and reviews significant recent court decisions that have followed, interpreted and applied <u>Croson</u> and <u>Adarand I</u> to the present and that are applicable to ODOT's disparity study and the strict scrutiny analysis. In particular, this analysis reviews the United States Court of Appeals for the Tenth Circuit decisions in <u>Adarand Construction</u>, Inc. v. Slater ("Adarand <u>VII"</u>) and <u>Concrete Works of Colorado v. City and County of Denver</u>, and the Federal District Court decision in <u>Kornhass Construction</u>, Inc. v. State of Oklahoma, Department of Central <u>Services</u>. In addition, the analysis reviews the recent federal cases that have considered the validity of the Federal DBE Program and a state's implementation of the DBE program, including <u>Northern Contracting</u>, Inc. v. Illinois DOT, Sherbrooke Turf, Inc. v. Minn DOT and Gross Seed v. Nebraska Department of Roads, and <u>Western States Paving Co. v. Washington State DOT</u>.

¹ Pub L. 109-59, Title I, § 1101(b), August 10, 2005, 119 Stat. 1156; preceded by Pub L. 105-178, Title I, § 1101(b), June 9, 1998, 112 Stat. 107.

² 49 CFR Part 26 (Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs ("Federal DBE Program").

³ <u>City of Richmond v. J.A. Croson</u>, 488 U.S. 469 (1989).

⁴ Adarand Constructors, Inc. v. Pena, 515 U.S. 200 (1995).

⁵ 228 F.3d 1147 (10th Cir. 2000) ("<u>Adarand VII</u>").

⁶ Concrete Works of Colorado v. City and County of Denver, 321 F.3d 950 (10th Cir. 2003), cert. denied, 540 U.S. 1027 (2003).

¹⁴⁰ F.Supp. 2d 1232 (W.D.OK 2001).

⁸ 473 F.3d 715 (7th Cir. 2007).

⁹ 345 F.3d 964 (8th Cir. 2003), <u>cert. denied</u>, 541 U.S. 1041 (2004).

The analyses of <u>Adarand VII</u> and these other recent cases are instructive to ODOT and the disparity study because they are the most recent and significant decisions by federal courts setting forth the legal framework applied to the Federal DBE Program and its implementation by recipients of federal financial assistance governed by 49 CFR Part 26.¹¹

Following Western States Paving, it is noteworthy that the USDOT, in particular for states in the Ninth Circuit Court of Appeals, recommended the use of disparity studies by recipients of Federal financial assistance to examine whether or not there is evidence of discrimination and its effects, and how remedies might be narrowly tailored in developing their DBE Program to comply with the Federal DBE Program. The USDOT suggests consideration of both statistical and anecdotal evidence. The USDOT instructs that recipients should ascertain evidence for discrimination and its effects separately for each group presumed to be disadvantaged in 49 CFR Part 26. The USDOT's Guidance provides that recipients should consider evidence of discrimination and its effects. The USDOT's "Guidance" is recognized by the federal regulations as "valid and binding, and constitutes the official position of the Department of Transportation "14 for states in the Ninth Circuit. Although ODOT is not in the Ninth Circuit, this Guidance along with the cases discussed below are instructive.

¹⁰ Western States Paving Co. v. Washington State DOT, 407 F.3d 983 (9th Cir. 2005).

¹¹ <u>See Northern Contracting, Inc. v. Illinois DOT</u>, 473 F.3d 715 (7th Cir. 2007); <u>Western States Paving</u>, 407 F.3d 983 (9 tir. 2005); <u>Sherbrooke Turf, Inc. v. Minn. DOT</u>, 345 F.3d 964 (8th Cir. 2003), <u>cert. denied</u>, 541 U.S. 1041 (2004); <u>Adarand Constructors, Inc. v. Slater</u>, 228 F.3d 1147 (10th Cir. 2000) ("Adarand VII").

¹² Questions and Answers Concerning Response to <u>Western States Paving Company v. Washington State Department of Transportation</u> (January 2006) [hereinafter USDOT Guidance], <u>available at http://www.fhwa.dot.gov/civilrights/dbe_memo_a5.htm; see</u> 49 CFR § 26.9.

¹³ <u>Id.</u>

¹⁴ <u>Id.</u>, 49 C.F.R. § 26.9.

B. U.S. Supreme Court Cases

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

In <u>Croson</u>, the U.S. Supreme Court struck down the City of Richmond's "set-aside" program as unconstitutional because it did not satisfy the strict scrutiny analysis applied to "race-based" governmental programs. J.A. Croson Co. ("Croson") challenged the City of Richmond's minority contracting preference plan, which required prime contractors to subcontract at least 30 percent of the dollar amount of contracts to one or more Minority Business Enterprises ("MBE"). In enacting the plan, the City cited past discrimination and an intent to increase minority business participation in construction projects as motivating factors.

The Supreme Court held the City of Richmond's "set-aside" action plan violated the Equal Protection Clause of the Fourteenth Amendment. The Court applied the "strict scrutiny" standard, generally applicable to any race-based classification, which requires a governmental entity to have a "compelling governmental interest" in remedying past identified discrimination and that any program adopted by a local or state government must be "narrowly tailored" to achieve the goal of remedying the identified discrimination.

The Court determined that the plan neither served a "compelling governmental interest" nor offered a "narrowly tailored" remedy to past discrimination. The Court found no "compelling governmental interest" because the City had not provided "a strong basis in evidence for its conclusion that [race-based] remedial action was necessary." The Court held the City presented no direct evidence of any race discrimination on its part in awarding construction contracts or any evidence that the City's prime contractors had discriminated against minority-owned subcontractors. The Court also found there were only generalized allegations of societal and industry discrimination coupled with positive legislative motives. The Court concluded that this was insufficient evidence to demonstrate a compelling interest in awarding public contracts on the basis of race.

Similarly, the Court held the City failed to demonstrate that the plan was "narrowly tailored" for several reasons, including because there did not appear to have been any consideration of race-neutral means to increase minority business participation in city contracting, and because of the over inclusiveness of certain minorities in the "preference" program (for example, Aleuts) without any evidence they suffered discrimination in Richmond.

The Court further found "if the City could show that it had essentially become a 'passive participant' in a system of racial exclusion practiced by elements of the local construction industry, ... [i]t could take affirmative steps to dismantle such a system." The Court held that "[w]here 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." The Supreme Court noted that it did not intend its decision to preclude a state or local government from "taking action to rectify the effects of identified discrimination within its jurisdiction."

2. Adarand Constructors, Inc. V. Pena ("Adarand I"), 515 U.S. 200 (1995)

In <u>Adarand I</u>, the U.S. Supreme Court extended the holding in <u>Croson</u> and ruled that all federal government programs that use racial or ethnic criteria as factors in procurement decisions must pass a test of strict scrutiny in order to survive constitutional muster. The cases interpreting <u>Adarand I</u> are the most recent and significant decisions by federal courts setting forth the legal framework for disparity studies as well as the predicate constitutional strict scrutiny standard of review, which applies to the implementation of the Federal DBE Program by recipients of federal funds.

C. The Legal Framework Applied to the Federal DBE Program and State and Local Government MBE/WBE Programs

The following provides an analysis for the legal framework focusing on recent key cases regarding the Federal DBE Program and state and local MBE/WBE programs, and their implications for a disparity study. The recent decisions involving the Federal DBE Program are instructive to the ODOT and the disparity study because they concern the strict scrutiny analysis and legal framework in this area, and implementation of the DBE Program by recipients of federal financial assistance (like ODOT) based on 49 C.F.R. Part 26.

After the <u>Adarand</u> decision, the U.S. Department of Justice in 1996 conducted a study of evidence on the issue of discrimination in government construction procurement contracts, which Congress relied upon as documenting a compelling governmental interest to have a federal program to remedy the effects of current and past discrimination in the transportation contracting industry for federally funded contracts. Subsequently, in 1998, Congress passed the Transportation Equity Act for the 21st Century ("TEA-21"), which authorized the United States Department of Transportation to expend funds for federal highway programs for 1998 - 2003. Pub.L. 105-178, Title I, § 1101(b), 112 Stat. 107, 113 (1998). The USDOT promulgated new regulations in 1999 contained at 49 C.F.R. Part 26 to establish the current Federal DBE Program. The TEA-21 was subsequently extended in both 2003 and 2005. The reauthorization of TEA-21 in 2005 was for a five year period from 2005 to 2009. Pub.L. 109-59, Title I, § 1101(b), August 10, 2005, 119 Stat. 1153-57 ("SAFETEA").

The Federal DBE Program as amended changed certain requirements for federal aid recipients and accordingly changed how recipients of federal funds implemented the Federal DBE Program for federally-assisted contracts. The federal government determined that there is a compelling governmental interest for race- and gender-based programs at the national level, and that the program is narrowly tailored because of the federal regulations, including the flexibility in implementation provided to individual federal aid recipients by the regulations. State and local governments are not required to implement race- and gender-based measures where they are not necessary to achieve DBE goals and those goals may be achieved by race- and gender-neutral measures. 49 C.F.R. § 26.51.

The Federal DBE Program established responsibility for implementing the DBE Program to state and local government recipients of federal funds. A recipient of federal financial assistance must set an annual DBE goal specific to conditions in the relevant marketplace. Even though an overall annual 10 percent aspirational goal applies at the federal level, it does not affect the goals established by individual state or local governmental recipients. The new Federal DBE Program outlines certain steps a state or local government recipient can follow in establishing a goal, and USDOT considers and must approve the goal and the recipient's DBE program. The implementation of the Federal DBE Program is substantially in the hands of the state or local government recipient and is set forth in detail in the federal regulations, including 49 C.F.R. § 26.45.

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¹⁵ Appendix-The Compelling Interest for Affirmative Action in Federal Procurement, 61 Fed. Reg. 26,050, 26,051-63 & nn. 1-136 (May 23, 1996) (hereinafter "The Compelling Interest"); see <u>Adarand VII</u>, 228 F.3d at 1167-1176, citing <u>The Compelling Interest</u>.

Provided in 49 C.F.R. § 26.45 are instructions as to how recipients of federal funds should set the overall goals for their DBE programs. In summary, the recipient establishes a base figure for relative availability of DBEs. 49 C.F.R. § 26.45(a), (b), (c). This is accomplished by determining the relative number of ready, willing, and able DBEs in the recipient's market. Id. Second, the recipient must determine an appropriate adjustment, if any, to the base figure to arrive at the overall goal. Id. at § 26.45(d). There are many types of evidence considered when determining if an adjustment is appropriate, according to 49 C.F.R. § 26.45(d). These include, among other types, the current capacity of DBEs to perform work on the recipient's contracts as measured by the volume of work DBEs have performed in recent years. If available, recipients consider evidence from related fields that affect the opportunities for DBEs to form, grow, and compete, such as statistical disparities between the ability of DBEs to obtain financing, bonding, and insurance, as well as data on employment, education, and training. Id. This process, based on the federal regulations, aims to establish a goal that reflects a determination of the level of DBE participation one would expect absent the effects of discrimination. 49 C.F.R. § 26.45(b)-(d).

Further, the Federal DBE Program requires state and local government recipients of federal funds to assess how much of the DBE goal can be met through race- and gender-neutral efforts and what percentage, if any, should be met through race- and gender-based efforts. 49 C.F.R. § 26.51.

A state or local government recipient is responsible for seriously considering and determining race-and gender-neutral measures that can be implemented. 49 C.F.R. § 26.51(b). A recipient of federal funds must establish a contract clause requiring prime contractors to promptly pay subcontractors in the Federal DBE Program (42 C.F.R. § 26.29). The Federal DBE Program also established certain record-keeping requirements, including maintaining a bidders list containing data on contractors and subcontractors seeking federally-assisted contracts from the agency (42 C.F.R. § 26.11). There are multiple administrative requirements that recipients must comply with in accordance with the regulations. 49 C.F.R. §§ 26.21-26.37.

Federal aid recipients are to certify DBEs according to their race/gender, size, net worth and other factors related to defining an economically and socially disadvantaged business as outlined in 49 C.F.R. §§ 26.61-26.73.

1. Strict Scrutiny Analysis

A race- and ethnicity-based program implemented by a state or local government is subject to the strict scrutiny constitutional analysis. ¹⁶ ODOT's implementation of the Federal DBE Program also is subject to the strict scrutiny analysis if it utilizes race- and ethnicity-based efforts. The strict scrutiny analysis is comprised of two prongs:

- The program must serve an established compelling governmental interest; and
- The program must be narrowly tailored to achieve that compelling government interest.¹⁷

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¹⁶ Croson, 448 U.S. at 493.

¹⁷ N. Contracting, 473 F.3d at 721; Western States Paving, 407 F.3d at 991; Sherbrooke Turf, 345 F.3d at 969; Adarand VII, 228 F.3d at 1176.; Associated Gen. Contractors of Ohio, Inc. v. Drabik ("Drabik II"), 214 F.3d 730 (6th Cir. 2000); Eng'g Constractors Ass'n of South Florida, Inc. v. Metropolitan Dade County, 122 F.3d 895 (11th Cir. 1997); Contractors

a. The Compelling Governmental Interest Requirement

The first prong of the strict scrutiny analysis requires a governmental entity to have a "compelling governmental interest" in remedying past identified discrimination in order to implement a race-and ethnicity-based program. State and local governments cannot rely on national statistics of discrimination in an industry to draw conclusions about the prevailing market conditions in their own regions. ¹⁸ Rather, state and local governments must measure discrimination in their state or local market, however, that is not necessarily confined by the jurisdiction's boundaries. ¹⁹

The federal courts have held that, with respect to the Federal DBE Program, recipients of federal funds do not need to independently satisfy this prong because Congress has satisfied the compelling interest test of the strict scrutiny analysis. The federal courts have held that Congress had ample evidence of discrimination in the transportation contracting industry to justify the Federal DBE Program (TEA-21), and the federal regulations implementing the program (49 C.F.R. Part 26). Specifically, the federal courts found Congress "spent decades compiling evidence of race discrimination in government highway contracting, of barriers to the formation of minority-owned construction businesses, and of barriers to entry." The evidence found to satisfy the compelling interest standard included numerous congressional investigations and hearings, and outside studies of statistical and anecdotal evidence (e.g. disparity studies).

Ass'n of E. Pa. v. City of Philadelphia ("CAEP I"), 6 F.3d 990 (3d Cir. 1993); Kornhass Construction, Inc. v. State of Oklahoma, Department of Central Services, 140 F.Supp. 1232, 1237-1238.

¹⁸ See e.g., Concrete Works, Inc. v. City and County of Denver ("Concrete Works I"), 36 F.3d 1513, 1520 (10th Cir. 1994).

¹⁹ <u>Id</u>.

N. Contracting, 473 F.3d at 721; Western States Paving, 407 F.3d at 991; Sherbrooke Turf, 345 F.3d at 969; Adarand VII, 228 F.3d at 1176.

²¹ <u>Id</u>. In the case of <u>Rothe Dev. Corp. v. U.S. Dept. of Defense</u>, 545 F.3d 1023 (Fed. Cir. 2008), the Federal Circuit Court of Appeals pointed out it had questioned in its earlier decision whether the evidence of discrimination before Congress was in fact so "outdated" so as to provide an insufficient basis in evidence for the Department of Defense program (i.e. whether a compelling interest was satisfied). 413 F.3d 1327 (Fed. Cir. 2005). The Federal Circuit Court of Appeals after its 2005 decision remanded the case to the district court to rule on this issue. Rothe considered the validity of race- and genderconscious Department of Defense ("DOD") regulations (2006 Reauthorization of the 1207 Program). The decisions in N. Contracting, Sherbrooke Turf, Adarand VII, and Western States Paving held the evidence of discrimination nationwide in transportation contracting was sufficient to find the Federal DBE Program on its face was constitutional. On remand, the district court in Rothe on August 10, 2007 issued its order denying plaintiff Rothe's Motion for Summary Judgment and granting Defendant United States Department of Defense's Cross-Motion for Summary Judgment, holding the 2006 Reauthorization of the 1207 DOD Program constitutional. Rothe Devel. Corp. v. U.S. Dept. of Defense, 499 F.Supp.2d 775 (W.D.Tex. Aug 10, 2007). The district court found the data contained in the Appendix (The Compelling Interest, 61 Fed. Reg. 26050 (1996)), the Urban Institute Report, and the Benchmark Study – relied upon in part by the courts in Sherbrooke Turf, Adarand VII, and Western States Paving in upholding the constitutionality of the Federal DBE Program – was "stale" as applied to and for purposes of the 2006 Reauthorization of the 1207 DOD Program. This district court finding was not appealed or considered by the Federal Circuit Court of Appeals. 545 F.3d 1023, 1037. The Federal Circuit Court of Appeals reversed the district court decision in part and held invalid the DOD Section 1207 program as enacted in 2006. 545 F.3d 1023, 1050. See the discussion of the 2008 Federal Circuit Court of Appeals decision in Rothe below in Section G.

²² Sherbrooke Turf, 345 F.3d at 970, (citing Adarand VII, 228 F.3d at 1167 – 76); Western States Paving, 407 F.3d at 992-93.

²³ See, e.g., <u>Adarand VII</u>, 228 F.3d at 1167–76; <u>see also Western States Paving</u>, 407 F.3d at 992 (Congress "explicitly relied upon" the Department of Justice study that "documented the discriminatory hurdles that minorities must overcome to secure federally funded contracts").

The evidentiary basis on which Congress relied to support its finding of discrimination includes:

- Barriers to minority business formation. Congress found that discrimination by prime contractors, unions, and lenders has woefully impeded the formation of qualified minority business enterprises in the subcontracting market nationwide, noting the existence of "old boy" networks, from which minority firms have traditionally been excluded, and the race-based denial of access to capital, which affects the formation of minority subcontracting enterprise. ²⁴
- Barriers to competition for existing minority enterprises. Congress found evidence showing systematic exclusion and discrimination by prime contractors, private sector customers, business networks, suppliers, and bonding companies precluding minority enterprises from opportunities to bid. When minority firms are permitted to bid on subcontracts, prime contractors often resist working with them. Congress found evidence of the same prime contractor using a minority business enterprise on a government contract not using that minority business enterprise on a private contract, despite being satisfied with that subcontractor's work. Congress found that informal, racially exclusionary business networks dominate the subcontracting construction industry.
- Local disparity studies. Congress found that local studies throughout the country tend to show a disparity between utilization and availability of minority-owned firms, raising an inference of discrimination. ²⁶
- Results of removing affirmative action programs. Congress found evidence that when race-conscious public contracting programs are struck down or discontinue, minority business participation in the relevant market drops sharply or even disappears, which courts have found strongly supports the government's claim that there are significant barriers to minority competition, raising the specter of discrimination.²⁷

Burden of proof. Under the strict scrutiny analysis, and to the extent a state or local governmental entity has implemented a race- and gender-conscious program, the governmental entity has the initial burden of showing a strong basis in evidence (including statistical and anecdotal evidence) to support its remedial action.²⁸ If the government makes its initial showing, the burden shifts to the challenger to rebut that showing.²⁹ The challenger bears the ultimate burden of showing that the governmental entity's evidence "did not support an inference of prior discrimination."³⁰

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²⁴ Adarand VII, 228 F.3d. at 1168-70; Western States Paving, 407 F.3d at 992.

²⁵ Adarand VII. at 1170-72.

²⁶ <u>Id</u>. at 1172-74.

²⁷ <u>Id</u>. at 1174-75.

²⁸ See Rothe Development Corp. v. Department of Defense, 545 F.3d 1023, 1036 (Fed. Cir. 2008); N. Contracting, Inc. Illinois, 473 F.3d at 715, 721 (7th Cir. 2007) (Federal DBE Program); Western States Paving Co. v. Washington State DOT, 407 F.3d 983, 991 (9th Cir. 2005) (Federal DBE Program); Sherbrooke Turf, Inc. v. Minnesota DOT, 345 F.3d 964, 969 (8th Cir. 2003) (Federal DBE Program); Adarand Constructors Inc. v. Slater ("Adarand VII"), 228 F.3d 1147, 1166 (10th Cir. 2000) (Federal DBE Program); Eng'g Contractors Ass'n, 122 F.3d at 916; Hershell Gill Consulting Engineers, Inc. v. Miami-Dade County, 333 F. Supp. 2d 1305, 1316 (S.D. Fla. 2004).

²⁹ Adarand VII, 228 F.3d at 1166; Eng'g Contractors Ass'n, 122 F.3d at 916.

³⁰ See, e.g., <u>Adarand VII</u>, 228 F.3d at 1166; <u>Eng'g Contractors Ass'n</u>, 122 F.3d at 916; <u>see also Sherbrooke Turf</u>, 345 F.3d at 971; N. Contracting, 473 F.3d at 721.

Statistical evidence. Statistical evidence of discrimination is a primary method used to determine whether or not a strong basis in evidence exists to develop, adopt and support a remedial program (i.e. to prove a compelling governmental interest), or in the case of a recipient complying with the Federal DBE Program, to prove narrow tailoring of program implementation at the state recipient level.³¹ "Where gross statistical disparities can be shown, they alone in a proper case may constitute prima facie proof of a pattern or practice of discrimination."³²

One form of statistical evidence is the comparison of a government's utilization of MBE/WBEs compared to the relative availability of qualified, willing and able MBE/WBEs.³³ The federal courts have held that a significant statistical disparity between the utilization and availability of minority-and women-owner firms may raise an inference of discriminatory exclusion.³⁴ However, a small statistical disparity, standing alone, may be insufficient to establish discrimination.³⁵

Other considerations regarding statistical evidence include:

- Availability analysis. A disparity index requires an availability analysis. MBE/WBE and DBE availability measures the relative number of MBE/WBEs and DBEs among all firms ready, willing and able to perform a certain type of work within a particular geographic market area. There is authority that measures of availability may be approached with different levels of specificity and the practicality of various approaches must be considered. An analysis is not devoid of probative value simply because it may theoretically be possible to adopt a more refined approach.
- **Utilization analysis.** Courts have accepted measuring utilization based on the proportion of an agency's contract dollars going to MBE/WBEs and DBEs.³⁹
- **Disparity index**. An important component of statistical evidence is the "disparity index." A disparity index is defined as the ratio of the percentage utilization to the percentage availability

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³¹ <u>See, e.g., Croson,</u> 488 U.S. at 509; <u>N. Contracting,</u> 473 F.3d at 718-19, 723-24; <u>Western States Paving,</u> 407 F.3d at 991; <u>Adarand VII</u>, 228 F.3d at 1166.

³² Croson, 488 U.S. at 501, quoting <u>Hazelwood School Dist. v. United States</u>, 433 U.S. 299, 307-08 (1977).

³³ <u>Croson</u>, 448 U.S. at 509; see <u>Rothe</u>, 545 F.3d at 1041-1042; <u>Concrete Works of Colo.</u>, <u>Inc. v. City and County of Denver</u> ("<u>Concrete Works II</u>"), 321 F.3d 950, 959 (10th Cir. 2003); <u>Drabik II</u>, 214 F.3d 730, 734-736.

³⁴ <u>See, e.g., Croson,</u> 488 U.S. at 509; <u>Rothe,</u> 545 F.3d at 1041; <u>Concrete Works II,</u> 321 F.3d at 970; <u>see Western States Paving,</u> 407 F.3d at 1001.

³⁵ Western States Paving, 407 F.3d at 1001.

³⁶ <u>See</u>, e.g., <u>Croson</u>, 448 U.S. at 509; 49 C.F.R. § 26.35; <u>Rothe</u>, 545 F.3d at 1041-1042; <u>N. Contracting</u>, 473 F.3d at 718, 722-23; <u>Western States Paving</u>, 407 F.3d at 995.

³⁷ Contractors Ass'n of Easton Pennsylvania, Inc. v. City of Philadelphia ("CAEP II"), 91 F.3d 586, 603 (3d Cir. 1996).

³⁸ <u>Id</u>.

³⁹ See Eng'g Contractors Ass'n, 122 F.3d at 912; N. Contracting, 473 F.3d at 717-720; Sherbrooke Turf, 345 F. 3d at 973.

Eng'g Contractors Ass'n, 122 F.3d at 914; W.H. Scott Constr. Co. v. City of Jackson, 199 F.3d 206, 218 (5th Cir. 1999); Contractors Ass'n of Eastern Pennsylvania, Inc. v. City of Philadelphia, 6 F.3d 990 at 1005 (3rd Cir. 1993).

times 100. A disparity index below 80 has been accepted as evidence of adverse impact. This has been referred to as "The Rule of Thumb" or "The 80 percent Rule." 41

Two standard deviation test. The standard deviation figure describes the probability that the measured disparity is the result of mere chance. Some courts have held that a statistical disparity corresponding to a standard deviation of less than two is not considered statistically significant.⁴²

Anecdotal evidence. Anecdotal evidence includes personal accounts of incidents, including of discrimination, told from the witness' perspective. Anecdotal evidence of discrimination, standing alone, generally is insufficient to show a systematic pattern of discrimination. 43 But personal accounts of actual discrimination may complement empirical evidence and play an important role in bolstering statistical evidence. 44 It has been held that anecdotal evidence of a local or state government's institutional practices that exacerbate discriminatory market conditions are often particularly probative.45

Examples of anecdotal evidence may include:

- Testimony of MBE/WBE or DBE owners regarding whether they face difficulties or barriers;
- Descriptions of instances in which MBE/WBE or DBE owners believe they were treated unfairly or were discriminated against based on their race, ethnicity, or gender or believe they were treated fairly without regard to race, ethnicity, or gender;
- Statements regarding whether firms solicit, or fail to solicit, bids or price quotes from MBE/WBE's or DBEs on non-goal projects; and
- Statements regarding whether there are instances of discrimination in bidding on specific contracts and in the financing and insurance markets. 46

⁴⁶ See, Northern Contracting, 2005 WL 2230195, at 13-15 (N.D. Ill. 2005), affirmed, 473 F.3d 715 (7th Cir. 2007); e.g., Concrete Works, 321 F.3d at 989; Adarand VII, 228 F.3d at 1166-76. For additional examples of anecdotal evidence, see Eng'g Contractors Ass'n, 122 F.3d at 924; Florida A.G.C. Council, Inc. v. State of Florida, 303 F. Supp. 2d 1307, 1325 (N.D. Fla. 2004); Concrete Works, 36 F.3d at 1520; Cone Corp. v. Hillsborough County, 908 F.2d 908, 915 (11th Cir. 1990).

⁴¹ <u>See</u>, <u>e.g.</u>, <u>Ricci v. DeStefano</u>, ___ U.S. ___, 129 S.Ct. 2658, 2678, 2009 WL 1835138 at 18, 77 USLW 4639 (June 29, 2009); <u>Rothe</u>, 545 F.3d at 1041; <u>Eng'g Contractors Ass'n</u>, 122 F.3d at 914, 923; <u>Concrete Works I</u>, 36 F.3d at 1524.

⁴² Eng'g Contractors Ass'n, 122 F.3d at 914, 917, 923. The Eleventh Circuit found that a disparity greater than two or three standard deviations has been held to be statistically significant and may create a presumption of discriminatory conduct.; Peightal v. Metropolitan Eng'g Contractors Ass'n, 26 F.3d 1545, 1556 (11th Cir. 1994). The Seventh Circuit Court of Appeals in Kadas v. MCI Systemhouse Corp., 255 F.3d 359 (7th Cir. 2001), raised questions as to the use of the standard deviation test alone as a controlling factor in determining the admissibility of statistical evidence to show discrimination. Rather, the Court concluded it is for the judge to say, on the basis of the statistical evidence, whether a particular significance level, in the context of a particular study in a particular case, is too low to make the study worth the consideration of judge or jury. 255 F.3d at 363.

⁴³ Eng'g Contractors Ass'n, 122 F.3d at 924-25; Coral Constr. Co. v. King County, 941 F.2d 910, 919 (9th Cir. 1991); O'Donnel Constr. Co. v. District of Columbia, 963 F.2d 420, 427 (D.C. Cir. 1992).

See, e.g., Eng'g Contractors Ass'n, 122 F.3d at 925-26; Concrete Works, 36 F.3d at 1520; Contractors Ass'n, 6 F.3d at 1003; Coral Constr. Co. v. King County, 941 F.2d 910, 919 (9th Cir. 1991).

⁴⁵ Concrete Works I, 36 F.3d at 1520.

Courts have accepted and recognize that anecdotal evidence is the witness' narrative of incidents told from his or her perspective, including the witness' thoughts, feelings, and perceptions, and thus anecdotal evidence need not be verified.⁴⁷

b. The Narrow Tailoring Requirement

The second prong of the strict scrutiny analysis requires that a race- or ethnicity-based program or legislation implemented to remedy past identified discrimination in the relevant market be "narrowly tailored" to reach that objective.

The narrow tailoring requirement has several components and the courts analyze several criteria or factors in determining whether a program or legislation satisfies this requirement including:

- The necessity for the relief and the efficacy of alternative race-, ethnicity-, and gender-neutral remedies:
- The flexibility and duration of the relief, including the availability of waiver provisions;
- The relationship of numerical goals to the relevant labor market; and
- The impact of a race-, ethnicity-, or gender-conscious remedy on the rights of third parties. 48

The second prong of the strict scrutiny analysis requires the implementation of the Federal DBE Program by recipients of federal funds be "narrowly tailored" to remedy identified discrimination in the particular recipient's contracting and procurement market. ⁴⁹ The narrow tailoring requirement has several components.

It should be pointed out that in the <u>Northern Contracting</u> decision (2007), the Seventh Circuit Court of Appeals cited its earlier precedent in <u>Milwaukee County Pavers v. Fielder</u> to hold "that a state is insulated from [a narrow tailoring] constitutional attack, absent a showing that the state exceeded its federal authority. IDOT [Illinois DOT] here is acting as an instrument of federal policy and Northern Contracting (NCI) cannot collaterally attack the federal regulations through a challenge to IDOT's program." The Seventh Circuit Court of Appeals distinguished both the Ninth Circuit Court of Appeals decision in <u>Western States Paving</u> and the Eighth Circuit Court of Appeals decision in <u>Sherbrooke Turf</u>, relating to an as-applied narrow tailoring analysis.

⁴⁷ See, e.g., Concrete Works II, 321 F.3d at 989; Eng'g Contractors Ass'n, 122 F.3d at 924-26; Cone Corp., 908 F.2d at 915; Northern Contracting, Inc. v. Illinois, 2005 WL 2230195 at *21, N. 32 (N.D. Ill. Sept. 8, 2005), aff'd 473 F.3d 715 (7th Cir. 2007).

⁴⁸ See, e.g., Rothe, 545 F.3d at 1036; Eng'g Contractors Ass'n, 122 F.3d at 927 (internal quotations and citations omitted).

⁴⁹ Western <u>States Paving</u>, 407 F3d at 995-998; <u>Sherbrooke Turf</u>, 345 F.3d at 970-71.

⁵⁰ 473 F.3d at 722

The Seventh Circuit Court of Appeals held that the state DOT's [Illinois DOT] application of a federally mandated program is limited to the question of whether the state exceeded its grant of federal authority under the Federal DBE Program. The Seventh Circuit Court of Appeals analyzed IDOT's compliance with the federal regulations regarding calculation of the availability of DBEs, adjustment of its goal based on local market conditions and its use of race-neutral methods set forth in the federal regulations. The court held NCI failed to demonstrate that IDOT did not satisfy compliance with the federal regulations (49 C.F.R. Part 26). Accordingly, the Seventh Circuit Court of Appeals affirmed the district court's decision upholding the validity of IDOT's DBE program. See the discussion of the Northern Contracting decision below in Section E.

According to <u>Western States Paving</u>, the recipient of federal funds must have independent evidence of discrimination within the recipient's own transportation contracting and procurement marketplace in order to determine whether or not there is the need for race-, ethnicity-, or gender-conscious remedial action.⁵⁴ Thus, the Ninth Circuit held in <u>Western States Paving</u> that mere compliance with the Federal DBE Program does not satisfy strict scrutiny.⁵⁵

In <u>Western States Paving</u>, the court found that even where evidence of discrimination is present in a recipient's market, a narrowly tailored program must apply only to those minority groups who have actually suffered discrimination. Thus, under a race- or ethnicity -conscious program, for each of the minority groups to be included in any race- or ethnicity-conscious elements in a recipient's implementation of the Federal DBE Program, there must be evidence that the minority group suffered discrimination within the recipient's marketplace.

To satisfy the narrowly tailored prong of the strict scrutiny analysis in the context of the Federal DBE Program, the federal courts, which evaluated state DOT DBE Programs and their implementation of the Federal DBE Program, have held the following factors are pertinent:

- Evidence of discrimination or its effects in the state transportation contracting industry;
- Flexibility and duration of a race- or ethnicity-conscious remedy;
- Relationship of any numerical DBE goals to the relevant market;
- Effectiveness of alternative race- and ethnicity-neutral remedies;
- Impact of a race- or ethnicity-conscious remedy on third parties; and
- Application of any race- or ethnicity-conscious program to only those minority groups who have actually suffered discrimination.⁵⁶

⁵² <u>Id</u>. at 723-24.

<u>1d</u>.

⁵¹ <u>Id</u>. at 722.

⁵³ Id.

⁵⁴ Western States Paving, 407 F.3d at 997-98, 1002-03.

⁵⁵ <u>Id</u>. at 995-1003. The Seventh Circuit Court of Appeals stated in a footnote that the court in <u>Western States Paving</u> "misread" the decision in <u>Milwaukee County Pavers</u>. 473 F.3d at 722, n.5.

⁵⁶ See, e.g., Western States Paving, 407 F.3d at 998; Sherbrooke Turf, 345 F.3d at 971; Adarand VII, 228 F.3d at 1181; Kornhass Construction, Inc. v. State of Oklahoma, Department of Central Services, 140 F.Supp. 2d at 1247-1248.

The Eleventh Circuit described the "the essence of the 'narrowly tailored' inquiry [as] the notion that explicitly racial preferences ... must only be a 'last resort' option." Courts have found that "[w]hile narrow tailoring does not require exhaustion of every conceivable race-neutral alternative, it does require serious, good faith consideration of whether such alternatives could serve the governmental interest at stake."

Similarly, the Sixth Circuit Court of Appeals in <u>Associated Gen. Contractors v. Drabik ("Drabik II")</u>, stated: "<u>Adarand</u> teaches that a court called upon to address the question of narrow tailoring must ask, "for example, whether there was 'any consideration of the use of race-neutral means to increase minority business participation' in government contracting ... or whether the program was appropriately limited such that it 'will not last longer than the discriminatory effects it is designed to eliminate." ⁵⁹

The Supreme Court in Parents Involved in Community Schools v. Seattle School District, 127 S.Ct. 2738, 2760-61 (2007) also found that race- and ethnicity-based measures should be employed as a last resort. The majority opinion stated: "Narrow tailoring requires 'serious, good faith consideration of workable race-neutral alternatives,' and yet in Seattle several alternative assignment plans—many of which would not have used express racial classifications—were rejected with little or no consideration." 127 S.Ct. at 2760-61; see also Grutter v. Bollinger, 539 U.S. 305 (2003). The Court found that the District failed to show it seriously considered race-neutral measures.

The "narrowly tailored" analysis is instructive in terms of developing any potential legislation or programs that involve DBEs implementing the Federal DBE Program, or in connection with determining appropriate remedial measures to achieve legislative objectives.

Race-, ethnicity-, and gender-neutral measures. To the extent a "strong basis in evidence" exists concerning discrimination in a local or state government's relevant contracting and procurement market, the courts analyze several criteria or factors to determine whether a state's implementation of a race- or ethnicity-conscious program is necessary and thus narrowly tailored to achieve remedying identified discrimination. One of the key factors discussed above is consideration of race-, ethnicity- and gender-neutral measures.

The courts require that a local or state government seriously consider race-, ethnicity- and gender-neutral efforts to remedy identified discrimination. And the courts have held unconstitutional those race- and ethnicity-conscious programs implemented without consideration of race- and ethnicity-neutral alternatives to increase minority business participation in state and local contracting.

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⁵⁷ Eng'g Contractors Ass'n, 122 F.3d at 926 (internal citations omitted); see also Virdi v. DeKalb County School District, 135 Fed. Appx. 262, 264, 2005 WL 138942 (11th Cir. 2005) (unpublished opinion); Webster v. Fulton County, 51 F. Supp. 2d 1354, 1380 (N.D. Ga. 1999), aff'd per curiam 218 F.3d 1267 (11th Cir. 2000).

⁵⁸ See Grutter v. Bollinger, 539 U.S. 306, 339 (2003), and Richmond v. J.A. Croson Co., 488 U.S. 469, 509-10 (1989).

⁵⁹ Associated Gen. Contractors of Ohio, Inc. v. Drabik ("Drabik II"), 214 F.3d 730, 738 (6th Cir. 2000).

⁶⁰ See, e.g., Western States Paving, 407 F.3d at 993; Sherbrooke Turf, 345 F.3d at 972; Adarand VII, 228 F.3d at 1179; Eng'g Contractors Ass'n, 122 F.3d at 927; Coral Constr., 941 F.2d at 923.

⁶¹ <u>See Croson</u>, 488 U.S. at 507; <u>Drabik I</u>, 214 F.3d at 738 (citations and internal quotations omitted); <u>see also Eng'g Contractors Ass'n</u>, 122 F.3d at 927; <u>Virdi</u>, 135 Fed. Appx. At 268.

The Court in <u>Croson</u> followed by decisions from federal courts of appeal found that local and state governments have at their disposal a "whole array of race-neutral devices to increase the accessibility of city contracting opportunities to small entrepreneurs of all races."

The federal regulations and the courts require that recipients of federal financial assistance governed by 49 C.F.R. Part 26 implement or seriously consider race-, ethnicity-, and gender-neutral remedies prior to the implementation of race-, ethnicity-, and gender-conscious remedies. The courts have also found "the regulations require a state to 'meet the maximum feasible portion of [its] overall goal by using race neutral means. 44

Examples of race-, ethnicity-, and gender-neutral alternatives include, but are not limited to, the following:

- Providing assistance in overcoming bonding and financing obstacles;
- Relaxation of bonding requirements;
- Providing technical, managerial and financial assistance;
- Establishing programs to assist start-up firms;
- Simplification of bidding procedures;
- Training and financial aid for all disadvantaged entrepreneurs;
- Non-discrimination provisions in contracts and in state law;
- Mentor-protégé programs and mentoring;
- Efforts to address prompt payments to smaller businesses;
- Small contract solicitations to make contracts more accessible to smaller businesses;
- Expansion of advertisement of business opportunities;

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^{62 &}lt;u>Croson</u>, 488 U.S. at 509-510.

^{63 49} C.F.R. § 26.51(a) requires recipients of federal funds to "meet the maximum feasible portion of your overall goal by using race-neutral means of facilitating DBE participation." See, e.g., Adarand VII, 228 F.3d at 1179; Western States Paving, 407 F.3d at 993; Sherbrooke Turf, 345 F.3d at 972. Additionally, in September of 2005, the United States Commission on Civil Rights (the "Commission") issued its report entitled "Federal Procurement After Adarand" setting forth its findings pertaining to federal agencies' compliance with the constitutional standard enunciated in Adarand. United States Commission on Civil Rights: Federal Procurement After Adarand (Sept. 2005), available at http://www.usccr.gov. The Commission found that 10 years after the Court's Adarand decision, federal agencies have largely failed to narrowly tailor their reliance on race-conscious programs and have failed to seriously consider race-neutral measures that would effectively redress discrimination. See discussion of USCCR Report at Section G. below. See also the discussion of Rothe below at Section G., which notes the dissenting option by Commissioner Yaki. 499 F.Sup.2d at 864-66.

⁶⁴ See, e.g., Northern Contracting, 473 F.3d at 723 – 724; Western States Paving, 407 F.3d at 993 (citing 49 C.F.R. § 26.51(a)).

- Outreach programs and efforts;
- "How to do business" seminars;
- Sponsoring networking sessions throughout the state acquaint small firms with large firms;
- Creation and distribution of MBE/WBE and DBE directories; and
- Streamlining and improving the accessibility of contracts to increase small business participation.

49 C.F.R. § 26.51(b) provides examples of race-, ethnicity-, and gender-neutral measures that should be seriously considered and utilized. The courts have held that while the narrow tailoring analysis does not require a governmental entity to exhaust every possible race-, ethnicity-, and gender-neutral alternative, it does "require serious, good faith consideration of workable race-neutral alternatives."

Additional factors considered under narrow tailoring. In addition to the required consideration of the necessity for the relief and the efficacy of alternative remedies (race- and ethnicity-neutral efforts), the courts require evaluation of additional factors as listed above. For example, to be considered narrowly tailored, courts have held that a MBE/WBE- or DBE-type program should include: (1) built-in flexibility; (2) a good faith efforts provisions; (3) waiver provisions; (4) a rational basis for goals; (5) graduation provisions; (6) remedies only for groups for which there were findings of discrimination; (7) sunset provisions; and (8) limitation in its geographical scope to the boundaries of the enacting jurisdiction.

⁶⁵ <u>See</u> 49 C.F.R. § 26.51(b); <u>see</u>, <u>e.g.</u>, <u>Croson</u>, 488 U.S. at 509-510; <u>N. Contracting</u>, 473 F.3d at 724; <u>Adarand VII</u>, 228 F.3d 1179; 49 C.F.R. § 26.51(b); <u>Eng'g Contractors Ass'n</u>, 122 F.3d at 927-29.

⁶⁶ Western States Paving, 407 F.3d at 993.

⁶⁷ Eng'g Contractors Ass'n, 122 F.3d at 927.

⁶⁸ CAEP I, 6 F.3d at 1009; Associated Gen. Contractors of Ca., Inc. v. Coalition for Economic Equality ("AGC of Ca."), 950 F.2d 1401, 1417 (9th Cir. 1991); Coral Constr. Co. v. King County, 941 F.2d 910, 923 (9th Cir. 1991); Cone Corp. v. Hillsborough County, 908 F.2d 908, 917 (11th Cir. 1990).

⁶⁹ CAEP I, 6 F.3d at 1019; Cone Corp., 908 F.2d at 917.

⁷⁰ <u>CAEP</u> I, 6 F.3d at 1009; AGC of Ca., 950 F.2d at 1417; <u>Cone Corp.</u>, 908 F.2d at 917.

⁷¹ <u>Id</u>.

⁷² <u>Id</u>.

⁷³ Western States Paving, 407 F.3d at 998; AGC of Ca., 950 F.2d at 1417.

⁷⁴ Peightal, 26 F.3d at 1559.

⁷⁵ Coral Constr., 941 F.2d at 925.

2. **Intermediate Scrutiny Analysis.**

Certain Federal Courts of Appeal apply intermediate scrutiny to gender-conscious programs. ⁷⁶ The courts have interpreted this standard to require that gender-based classifications be:

- Supported by both "sufficient probative" evidence or "exceedingly persuasive justification" in support of the stated rationale for the program; and
- 2. Substantially related to the achievement of that underlying objective.⁷⁷

Under the traditional intermediate scrutiny standard, the court reviews a gender-conscious program by analyzing whether the state actor has established a sufficient factual predicate for the claim that female-owned businesses have suffered discrimination, and whether the gender-conscious remedy is an appropriate response to such discrimination. This standard requires the state actor to present "sufficient probative" evidence in support of its stated rationale for the program. 78

Intermediate scrutiny, as interpreted by certain federal circuit courts of appeal, requires a direct, substantial relationship between the objective of the gender preference and the means chosen to accomplish the objective. The measure of evidence required to satisfy intermediate scrutiny is less than that necessary to satisfy strict scrutiny. Unlike strict scrutiny, the intermediate scrutiny standard it has been held does not require a showing of government involvement, active or passive, in the discrimination it seeks to remedy. 79 And the Eleventh Circuit has held that "[w]hen a genderconscious affirmative action program rests on sufficient evidentiary foundation, the government is not required to implement the program only as a last resort Additionally, under intermediate scrutiny, a gender-conscious program need not closely tie its numerical goals to the proportion of qualified women in the market."80

Ongoing Review. The above represents a brief summary of the legal framework pertinent to implementation of MBE/WBE, DBE, or race-, ethnicity-, or gender-neutral programs. Because this is a dynamic area of the law, the framework is subject to ongoing review as the law continues to evolve. The following provides more detailed summaries of key recent decisions.

⁷⁶ See generally, Western States Paving, 407 F.3d at 990 n. 6; Coral Constr. Co., 941 F.2d at 931-932 (9th Cir. 1991); Equal. Found. v. City of Cincinnati, 128 F.3d 289 (6th Cir. 1997); Eng'g Contractors Ass'n, 122 F.3d at 905, 908, 910; Ensley Branch N.A.A.C.P. v. Seibels, 31 F.3d 1548 (11th Cir. 1994); see also U.S. v. Virginia, 518 U.S. 515, 532 and n.6 (1996)("exceedingly persuasive justification.")

⁷⁷ <u>Id</u>.

⁷⁸ <u>Id</u>. The Seventh Circuit Court of Appeals, however, in <u>Builders Ass'n of Greater Chicago v. County of Cook, Chicago</u>, did not hold there is a different level of scrutiny for gender discrimination or gender based programs. 256 F.3d 642, 644-45 (7th Cir. 2001). The Court in <u>Builders Ass'n</u> rejected the distinction applied by the Eleventh Circuit in <u>Engineering</u>

See Eng'g Contractors Ass'n, 122 F.3d at 910.

⁸⁰ Id. at 929 (internal citations omitted.)

- D. Recent Decisions Involving State or Local Government MBE/WBE Programs and the Federal DBE Program In The Ninth Circuit.
- Adarand Constructors, Inc. v. Slater, 228 F.3d 1147 (10th Cir. 2000) cert. granted then dismissed as improvidently granted sub nom.
 <u>Adarand Constructors, Inc. v. Mineta</u>, 532 U.S. 941, 534 U.S. 103 (2001)

This is the <u>Adarand</u> decision by the United States Court of Appeals for the Tenth Circuit, which was on remand from the earlier Supreme Court decision applying the strict scrutiny analysis to any constitutional challenge to the Federal DBE Program. <u>See Adarand Constructors, Inc. v. Pena</u>, 515 U.S. 200 (1995). The decision of the Tenth Circuit in this case was considered by the United States Supreme Court, after that court granted certiorari to consider certain issues raised on appeal. The Supreme Court subsequently dismissed the writ of certiorari "as improvidently granted" without reaching the merits of the case. The court did not decide the constitutionality of the Federal DBE Program as it applies to state DOTs or local governments.

The Supreme Court held that the Tenth Circuit had not considered the issue before the Supreme Court on certiorari, namely whether a race-based program applicable to direct federal contracting is constitutional. This issue is distinguished from the issue of the constitutionality of the United States DOT DBE Program as it pertains to procurement of federal funds for highway projects let by states, and the implementation of the Federal DBE Program by state DOTs. Therefore, the Supreme Court held it would not reach the merits of a challenge to federal laws relating to direct federal procurement.

Turning to the Tenth Circuit decision in <u>Adarand Constructors, Inc. v. Slater</u>, 228 F.3d 1147 (10th Cir. 2000), the Tenth Circuit upheld in general the facial constitutionality of the Federal DBE Program. The court found that the federal government had a compelling interest in not perpetuating the effects of racial discrimination in its own distribution of federal funds and in remediating the effects of past discrimination in government contracting, and that the evidence supported the existence of past and present discrimination sufficient to justify the Federal DBE Program. The court also held that the Federal DBE Program is "narrowly tailored," and therefore upheld the constitutionality of the Federal DBE Program.

It is significant to note that the court in determining the Federal DBE Program is "narrowly tailored" focused on the current regulations, 49 C.F.R. Part 26, and in particular § 26.1(a), (b), and (f). The court pointed out that the federal regulations instruct recipients as follows:

[y]ou must meet the maximum feasible portion of your overall goal by using race-neutral means of facilitating DBE participation, 49 C.F.R. § 26.51(a)(2000); see also 49 C.F.R. § 26.51(f)(2000) (if a recipient can meet its overall goal through race-neutral means, it must implement its program without the use of race-conscious contracting measures), and enumerate a list of race-neutral measures, see 49 C.F.R. § 26.51(b)(2000). The current regulations also outline several race-neutral means available to program recipients including assistance in overcoming bonding

and financing obstacles, providing technical assistance, establishing programs to assist start-up firms, and other methods. See 49 C.F.R. § 26.51(b). We therefore are dealing here with revisions that emphasize the continuing need to employ non-race-conscious methods even as the need for race-conscious remedies is recognized. 228 F.3d at 1178-1179.

In considering whether the Federal DBE Program is narrowly tailored, the court also addressed the argument made by the contractor that the program is over- and under-inclusive for several reasons, including that Congress did not inquire into discrimination against each particular minority racial or ethnic group. The court held that insofar as the scope of inquiry suggested was a particular state's construction industry alone, this would be at odds with its holding regarding the compelling interest in Congress's power to enact nationwide legislation. <u>Id.</u> at 1185-1186. The court held that because of the "unreliability of racial and ethnic categories and the fact that discrimination commonly occurs based on much broader racial classifications," extrapolating findings of discrimination against the various ethnic groups "is more a question of nomenclature than of narrow tailoring." <u>Id.</u> The court found that the "Constitution does not erect a barrier to the government's effort to combat discrimination based on broad racial classifications that might prevent it from enumerating particular ethnic origins falling within such classifications." <u>Id.</u>

Finally, the Tenth Circuit did not specifically address a challenge to the letting of federally-funded construction contracts by state departments of transportation. The court pointed out that plaintiff Adarand "conceded that its challenge in the instant case is to 'the federal program, implemented by federal officials,' and not to the letting of federally-funded construction contracts by state agencies." 228 F.3d at 1187. The court held that it did not have before it a sufficient record to enable it to evaluate the separate question of Colorado DOT's implementation of race-conscious policies. <u>Id.</u> at 1187-1188.

Concrete Works of Colorado, Inc. v. City and County of Denver, 321 F.3d 950 (10th Cir. 2003), cert. denied, 540 U.S. 1027, 124 S. Ct. 556 (2003) (Scalia, Justice with whom the Chief Justice Rehnquist, joined, dissenting from the denial of certiorari)

This case is instructive to the disparity study because it is one of the only recent decisions to uphold the validity of a local government MBE/WBE program. It is significant to note that the Tenth Circuit did not apply the narrowly tailored test and thus did not rule on an application of the narrowly tailored test, instead finding that the plaintiff had waived that challenge in one of the earlier decisions in the case. This case also is one of the only cases to have found private sector marketplace discrimination as a basis to uphold an MBE/WBE-type program.

In <u>Concrete Works</u> the United States Court of Appeals for the Tenth Circuit held that the City and County of Denver had a compelling interest in limiting race discrimination in the construction industry, that the City had an important governmental interest in remedying gender discrimination in the construction industry, and found that the City and County of Denver had established a compelling governmental interest to have a race- and gender-based program. In <u>Concrete Works</u>, the Court of Appeals did not address the issue of whether the MWBE Ordinance was narrowly tailored because it held the district court was barred under the law of the case doctrine from considering that

issue since it was not raised on appeal by the plaintiff construction companies after they had lost that issue on summary judgment in an earlier decision. Therefore, the Court of Appeals did not reach a decision as to narrowly tailoring or consider that issue in the case.

Case history. Plaintiff, Concrete Works of Colorado, Inc. ("CWC") challenged the constitutionality of an "affirmative action" ordinance enacted by the City and County of Denver (hereinafter the "City" or "Denver"). 321 F.3d 950, 954 (10th Cir. 2003). The ordinance established participation goals for racial minorities and women on certain City construction and professional design projects. <u>Id.</u>

The City enacted an Ordinance No. 513 ("1990 Ordinance") containing annual goals for MBE/WBE utilization on all competitively bid projects. <u>Id.</u> at 956. A prime contractor could also satisfy the 1990 Ordinance requirements by using "good faith efforts." <u>Id.</u> In 1996, the City replaced the 1990 Ordinance with Ordinance No. 304 (the "1996 Ordinance"). The district court stated that the 1996 Ordinance differed from the 1990 Ordinance by expanding the definition of covered contracts to include some privately financed contracts on City-owned land; added updated information and findings to the statement of factual support for continuing the program; refined the requirements for W/MBE certification and graduation; mandated the use of MBEs and WBEs on change orders; and expanded sanctions for improper behavior by MBEs, WBEs or majority-owned contractors in failing to perform the affirmative action commitments made on City projects. <u>Id.</u> at 956-57.

The 1996 Ordinance was amended in 1998 by Ordinance No. 948 (the "1998 Ordinance"). The 1998 Ordinance reduced annual percentage goals and prohibited an MBE or a WBE, acting as a bidder, from counting self-performed work toward project goals. <u>Id.</u> at 957.

CWC filed suit challenging the constitutionality of the 1990 Ordinance. <u>Id.</u> The district court conducted a bench trial on the constitutionality of the three ordinances. <u>Id.</u> The district court ruled in favor of CWC and concluded that the ordinances violated the Fourteenth Amendment. <u>Id.</u> The City then appealed to the Tenth Circuit Court of Appeals. <u>Id.</u> The Court of Appeals reversed and remanded. <u>Id.</u> at 954.

The Court of Appeals applied strict scrutiny to race-based measures and intermediate scrutiny to the gender-based measures. <u>Id.</u> at 957-58, 959. The Court of Appeals also cited <u>Richmond v. J.A.</u>

<u>Croson Co.</u>, for the proposition that a governmental entity "can use its spending powers to remedy private discrimination, if it identifies that discrimination with the particularity required by the Fourteenth Amendment." 488 U.S. 469, 492 (1989) (plurality opinion). Because "an effort to alleviate the effects of *societal* discrimination is not a compelling interest," the Court of Appeals held that Denver could demonstrate that its interest is compelling only if it (1) identified the past or present discrimination "with some specificity," and (2) demonstrated that a "strong basis in evidence" supports its conclusion that remedial action is necessary. <u>Id.</u> at 958, quoting <u>Shaw v. Hunt</u>, 517 U.S. 899, 909-10 (1996).

The court held that Denver could meet its burden without conclusively proving the existence of past or present racial discrimination. <u>Id.</u> Rather, Denver could rely on "empirical evidence that demonstrates 'a significant statistical disparity between the number of qualified minority contractors ... and the number of such contractors actually engaged by the locality or the locality's prime

contractors." <u>Id.</u>, quoting <u>Croson</u>, 488 U.S. at 509 (plurality opinion). Furthermore, the Court of Appeals held that Denver could rely on statistical evidence gathered from the six-county Denver Metropolitan Statistical Area (MSA) and could supplement the statistical evidence with anecdotal evidence of public and private discrimination. <u>Id.</u>

The Court of Appeals held that Denver could establish its compelling interest by presenting evidence of its own direct participation in racial discrimination or its passive participation in private discrimination. <u>Id.</u> The Court of Appeals held that once Denver met its burden, CWC had to introduce "credible, particularized evidence to rebut [Denver's] initial showing of the existence of a compelling interest, which could consist of a neutral explanation for the statistical disparities." <u>Id.</u> (internal citations and quotations omitted). The Court of Appeals held that CWC could also rebut Denver's statistical evidence "by (1) showing that the statistics are flawed; (2) demonstrating that the disparities shown by the statistics are not significant or actionable; or (3) presenting contrasting statistical data." <u>Id.</u> (internal citations and quotations omitted). The Court of Appeals held that the burden of proof at all times remained with CWC to demonstrate the unconstitutionality of the ordinances. <u>Id.</u> at 960.

The Court of Appeals held that to meet its burden of demonstrating an important governmental interest per the intermediate scrutiny analysis, Denver must show that the gender-based measures in the ordinances were based on "reasoned analysis rather than through the mechanical application of traditional, often inaccurate, assumptions." <u>Id.</u>, quoting <u>Miss. Univ. for Women v. Hogan</u>, 458 U.S. 718, 726 (1982).

The studies. Denver presented historical, statistical and anecdotal evidence in support of its MBE/WBE programs. Denver commissioned a number of studies to assess its MBE/WBE programs. Id. at 962. The consulting firm hired by Denver utilized disparity indices in part. Id. at 962. The 1990 Study also examined MBE and WBE utilization in the overall Denver MSA construction market, both public and private. Id. at 963.

The consulting firm also interviewed representatives of MBEs, WBEs, majority-owned construction firms, and government officials. <u>Id.</u> Based on this information, the 1990 Study concluded that, despite Denver's efforts to increase MBE and WBE participation in DPW projects, some Denver employees and private contractors engaged in conduct designed to circumvent the goals program. <u>Id.</u> After reviewing the statistical and anecdotal evidence contained in the 1990 Study, the City Council enacted the 1990 Ordinance. <u>Id.</u>

After the Tenth Circuit decided Concrete Works II, Denver commissioned another study (the "1995 Study"). Id. at 963. Using 1987 Census Bureau data, the 1995 Study again examined utilization of MBEs and WBEs in the construction and professional design industries within the Denver MSA. Id. The 1995 Study concluded that MBEs and WBEs were more likely to be one-person or family-run businesses. The Study concluded that Hispanic-owned firms were less likely to have paid employees than white-owned firms but that Asian/Native American-owned firms were more likely to have paid employees than white- or other minority-owed firms. To determine whether these factors explained overall market disparities, the 1995 Study used the Census data to calculate disparity indices for all firms in the Denver MSA construction industry and separately calculated disparity indices for firms with paid employees and firms with no paid employees. Id. at 964.

The Census Bureau information was also used to examine average revenues per employee for Denver MSA construction firms with paid employees. Hispanic-, Asian-, Native American-, and womenowned firms with paid employees all reported lower revenues per employee than majority-owned firms. The 1995 Study also used 1990 Census data to calculate rates of self-employment within the Denver MSA construction industry. The Study concluded that the disparities in the rates of self-employment for blacks, Hispanics, and women persisted even after controlling for education and length of work experience. The 1995 Study controlled for these variables and reported that blacks and Hispanics working in the Denver MSA construction industry were less than half as likely to own their own businesses as were whites of comparable education and experience. Id.

In late 1994 and early 1995, a telephone survey of construction firms doing business in the Denver MSA was conducted. <u>Id.</u> at 965. Based on information obtained from the survey, the consultant calculated percentage utilization and percentage availability of MBEs and WBEs. Percentage utilization was calculated from revenue information provided by the responding firms. Percentage availability was calculated based on the number of MBEs and WBEs that responded to the survey question regarding revenues. Using these utilization and availability percentages, the 1995 Study showed disparity indices of 0.64 for MBEs and 0.70 for WBEs in the construction industry. In the professional design industry, disparity indices were 0.67 for MBEs and 0.69 for WBEs. The 1995 Study concluded that the disparity indices obtained from the telephone survey data were more accurate than those obtained from the 1987 Census data because the data obtained from the telephone survey were more recent, had a narrower focus, and included data on C corporations. Additionally, it was possible to calculate disparity indices for professional design firms from the survey data. <u>Id.</u>

In 1997, the City conducted another study to estimate the availability of MBEs and WBEs and to examine, *inter alia*, whether race and gender discrimination limited the participation of MBEs and WBEs in construction projects of the type typically undertaken by the City (the "1997 Study"). <u>Id.</u> at 966. The 1997 Study used geographic and specialization information to calculate MBE/WBE availability. Availability was defined as "the ratio of MBE/WBE firms to the total number of firms in the four-digit SIC codes and geographic market area relevant to the City's contracts." <u>Id.</u>

The 1997 Study compared MBE/WBE availability and utilization in the Colorado construction industry. <u>Id.</u> The statewide market was used because necessary information was unavailable for the Denver MSA. <u>Id.</u> at 967. Additionally, data collected in 1987 by the Census Bureau was used because more current data was unavailable. The Study calculated disparity indices for the statewide construction market in Colorado as follows: 0.41 for African American firms, 0.40 for Hispanic firms, 0.14 for Asian and other minorities, and 0.74 for women-owned firms. <u>Id.</u>

The 1997 Study also contained an analysis of whether African Americans, Hispanics, or Asian Americans working in the construction industry are less likely to be self-employed than similarly situated whites. <u>Id.</u> Using data from the Public Use Microdata Samples ("PUMS") of the 1990 Census of Population and Housing, the Study used a sample of individuals working in the construction industry. The Study concluded that in both Colorado and the Denver MSA, African Americans, Hispanics, and Native Americans working in the construction industry had lower self-employment rates than whites. Asian Americans had higher self-employment rates than whites.

Using the availability figures calculated earlier in the Study, the Study then compared the actual availability of MBE/WBEs in the Denver MSA with the potential availability of MBE/WBEs if they formed businesses at the same rate as whites with the same characteristics. <u>Id.</u> Finally, the Study examined whether self-employed minorities and women in the construction industry have lower earnings than white males with similar characteristics. <u>Id.</u> at 968. Using linear regression analysis, the Study compared business owners with similar years of education, of similar age, doing business in the same geographic area, and having other similar demographic characteristics. Even after controlling for several factors, the results showed that self-employed African Americans, Hispanics, Native Americans, and women had lower earnings than white males. <u>Id.</u>

The 1997 Study also conducted a mail survey of both MBE/WBEs and non-MBE/WBEs to obtain information on their experiences in the construction industry. Of the MBE/WBEs who responded, 35 percent indicated that they had experienced at least one incident of disparate treatment within the last five years while engaged in business activities. The survey also posed the following question: "How often do prime contractors who use your firm as a subcontractor on public sector projects with [MBE/WBE] goals or requirements ... also use your firm on public sector or private sector projects without [MBE/WBE] goals or requirements?" Fifty-eight percent of minorities and 41 percent of white women who responded to this question indicated they were "seldom or never" used on nongoals projects. Id.

MBE/WBEs were also asked whether the following aspects of procurement made it more difficult or impossible to obtain construction contracts: (1) bonding requirements, (2) insurance requirements, (3) large project size, (4) cost of completing proposals, (5) obtaining working capital, (6) length of notification for bid deadlines, (7) prequalification requirements, and (8) previous dealings with an agency. This question was also asked of non-MBE/WBEs in a separate survey. With one exception, MBE/WBEs considered each aspect of procurement more problematic than non-MBE/WBEs. To determine whether a firm's size or experience explained the different responses, a regression analysis was conducted that controlled for age of the firm, number of employees, and level of revenues. The results again showed that with the same, single exception, MBE/WBEs had more difficulties than non-MBE/WBEs with the same characteristics. Id. at 968-69.

After the 1997 Study was completed, the City enacted the 1998 Ordinance. The 1998 Ordinance reduced the annual goals to 10 percent for both MBEs and WBEs and eliminated a provision which previously allowed MBE/WBEs to count their own work toward project goals. <u>Id.</u> at 969.

The anecdotal evidence included the testimony of the senior vice-president of a large, majority-owned construction firm who stated that when he worked in Denver, he received credible complaints from minority and women-owned construction firms that they were subject to different work rules than majority-owned firms. <u>Id.</u> He also testified that he frequently observed graffiti containing racial or gender epithets written on job sites in the Denver metropolitan area. Further, he stated that he believed, based on his personal experiences, that many majority-owned firms refused to hire minority- or women-owned subcontractors because they believed those firms were not competent. <u>Id.</u>

Several MBE/WBE witnesses testified that they experienced difficulty prequalifying for private sector projects and projects with the City and other governmental entities in Colorado. One individual testified that her company was required to prequalify for a private sector project while no similar requirement was imposed on majority-owned firms. Several others testified that they attempted to

prequalify for projects but their applications were denied even though they met the prequalification requirements. <u>Id.</u>

Other MBE/WBEs testified that their bids were rejected even when they were the lowest bidder; that they believed they were paid more slowly than majority-owned firms on both City projects and private sector projects; that they were charged more for supplies and materials; that they were required to do additional work not part of the subcontracting arrangement; and that they found it difficult to join unions and trade associations. <u>Id.</u> There was testimony detailing the difficulties MBE/WBEs experienced in obtaining lines of credit. One WBE testified that she was given a false explanation of why her loan was declined; another testified that the lending institution required the co-signature of her husband even though her husband, who also owned a construction firm, was not required to obtain her co-signature; a third testified that the bank required her father to be involved in the lending negotiations. <u>Id.</u>

The court also pointed out anecdotal testimony involving recitations of racially- and gender-motivated harassment experienced by MBE/WBEs at work sites. There was testimony that minority and female employees working on construction projects were physically assaulted and fondled, spat upon with chewing tobacco, and pelted with two-inch bolts thrown by males from a height of 80 feet. <u>Id.</u> at 969-70.

The legal framework applied by the court. The court held that the district court incorrectly believed Denver was required to prove the existence of discrimination. Instead of considering whether Denver had demonstrated strong evidence from which an inference of past or present discrimination could be drawn, the district court analyzed whether Denver's evidence showed that there is pervasive discrimination. Id. at 970. The court, quoting Concrete Works II, stated that "the Fourteenth Amendment does not require a court to make an ultimate finding of discrimination before a municipality may take affirmative steps to eradicate discrimination." Id. at 970, quoting Concrete Works II, 36 F.3d 1513, 1522 (10th Cir. 1994). Denver's initial burden was to demonstrate that strong evidence of discrimination supported its conclusion that remedial measures were necessary. Strong evidence is that "approaching a prima facie case of a constitutional or statutory violation," not irrefutable or definitive proof of discrimination. Id. at 97, quoting Croson, 488 U.S. at 500. The burden of proof at all times remained with the contractor plaintiff to prove by a preponderance of the evidence that Denver's "evidence did not support an inference of prior discrimination and thus a remedial purpose." Id., quoting Adarand VII, 228 F.3d at 1176.

Denver, the court held, did introduce evidence of discrimination against each group included in the ordinances. <u>Id.</u> at 971. Thus, Denver's evidence did not suffer from the problem discussed by the court in <u>Croson</u>. The court held the district court erroneously concluded that Denver must demonstrate that the private firms directly engaged in any discrimination in which Denver passively participates do so intentionally, with the purpose of disadvantaging minorities and women. The <u>Croson</u> majority concluded that a "city would have a compelling interest in preventing its tax dollars from assisting [local trade] organizations in maintaining a racially segregated construction market." <u>Id.</u> at 971, quoting <u>Croson</u>, 488 U.S. 503. Thus, the court held Denver's burden was to introduce evidence which raised the inference of discriminatory exclusion in the local construction industry and linked its spending to that discrimination. <u>Id.</u>

The court noted the Supreme Court has stated that the inference of discriminatory exclusion can arise from statistical disparities. <u>Id.</u>, citing <u>Croson</u>, 488 U.S. at 503. Accordingly, it concluded that Denver could meet its burden through the introduction of statistical and anecdotal evidence. To the extent the district court required Denver to introduce additional evidence to show discriminatory motive or intent on the part of private construction firms, the district court erred. Denver, according to the court, 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. <u>Id.</u> at 972.

The court found Denver's statistical and anecdotal evidence relevant because it identifies discrimination in the local construction industry, not simply discrimination in society. The court held the genesis of the identified discrimination is irrelevant and the district court erred when it discounted Denver's evidence on that basis. <u>Id.</u>

The court held the district court erroneously rejected the evidence Denver presented on marketplace discrimination. <u>Id.</u> at 973. The court rejected the district court's erroneous legal conclusion that a municipality may only remedy its own discrimination. The court stated this conclusion is contrary to the holdings in <u>Concrete Works II</u> and the plurality opinion in <u>Croson</u>. <u>Id.</u> The court held it previously recognized in this case that "a municipality has a compelling interest in taking affirmative steps to remedy both public *and private* discrimination specifically identified in its area." <u>Id.</u>, quoting <u>Concrete Works II</u>, 36 F.3d at 1529 (emphasis added). In <u>Concrete Works II</u>, the court stated that "we do not read <u>Croson</u> as requiring the municipality to identify an exact linkage between its award of public contracts and private discrimination." <u>Id.</u>, quoting <u>Concrete Works II</u>, 36 F.3d at 1529.

The court stated that Denver could meet its burden of demonstrating its compelling interest with evidence of private discrimination in the local construction industry coupled with evidence that it has become a passive participant in that discrimination. <u>Id.</u> at 973. Thus, Denver was not required to demonstrate that it is "guilty of prohibited discrimination" to meet its initial burden. <u>Id.</u>

Additionally, the court had previously concluded that Denver's statistical studies, which compared utilization of MBE/WBEs to availability, supported the inference that "local prime contractors" are engaged in racial and gender discrimination. <u>Id.</u> at 974, quoting <u>Concrete Works II</u>, 36 F.3d at 1529. Thus, the court held Denver's disparity studies should not have been discounted because they failed to specifically identify those individuals or firms responsible for the discrimination. <u>Id.</u>

The Court's rejection of CWC's arguments and the district court findings

Use of marketplace data. The court held the district court, inter alia, erroneously concluded that the disparity studies upon which Denver relied were significantly flawed because they measured discrimination in the overall Denver MSA construction industry, not discrimination by the City itself. Id. at 974. The court found that the district court's conclusion was directly contrary to the holding in <u>Adarand VII</u> that evidence of both public and private discrimination in the construction industry is relevant. Id., citing <u>Adarand VII</u>, 228 F.3d at 1166-67).

The court held the conclusion reached by the majority in <u>Croson</u> that marketplace data are relevant in equal protection challenges to affirmative action programs was consistent with the approach later taken by the court in <u>Shaw v. Hunt</u>. <u>Id.</u> at 975. In <u>Shaw</u>, a majority of the court relied on the majority opinion in <u>Croson</u> for the broad proposition that a governmental entity's "interest in

remedying the effects of past or present racial discrimination may in the proper case justify a government's use of racial distinctions." <u>Id.</u>, quoting <u>Shaw</u>, 517 U.S. at 909. The <u>Shaw</u> court did not adopt any requirement that only discrimination by the governmental entity, either directly or by utilizing firms engaged in discrimination on projects funded by the entity, was remediable. The court, however, did set out two conditions that must be met for the governmental entity to show a compelling interest. "First, the discrimination must be identified discrimination." <u>Id.</u> at 976, quoting <u>Shaw</u>, 517 U.S. at 910. The City can satisfy this condition by identifying the discrimination, "*public or private*, with some specificity.' "<u>Id.</u> at 976, citing <u>Shaw</u>, 517 U.S. at 910, quoting <u>Croson</u>, 488 U.S. at 504 (emphasis added). The governmental entity must also have a "strong basis in evidence to conclude that remedial action was necessary." <u>Id</u>. Thus, the court concluded <u>Shaw</u> specifically stated that evidence of either public or private discrimination could be used to satisfy the municipality's burden of producing strong evidence. <u>Id.</u> at 976.

In <u>Adarand VII</u>, the court noted it concluded that evidence of marketplace discrimination can be used to support a compelling interest in remedying past or present discrimination through the use of affirmative action legislation. <u>Id.</u>, citing <u>Adarand VII</u>, 228 F.3d at 1166-67 ("[W]e may consider public and private discrimination not only in the specific area of government procurement contracts but also in the construction industry generally; thus *any findings Congress has made as to the entire construction industry are relevant.*" (emphasis added)). Further, the court pointed out in this case it earlier rejected the argument CWC reasserted here that marketplace data are irrelevant and remanded the case to the district court to determine whether Denver could link its public spending to "the Denver MSA evidence of industry-wide discrimination." <u>Id.</u>, quoting <u>Concrete Works II</u>, 36 F.3d at 1529. The court stated that evidence explaining "the Denver government's role in contributing to the underutilization of MBEs and WBEs in the *private construction market in the Denver MSA*" was relevant to Denver's burden of producing strong evidence. <u>Id.</u>, quoting <u>Concrete Works II</u>, 36 F.3d at 1530 (emphasis added).

Consistent with the court's mandate in <u>Concrete Works II</u>, the City attempted to show at trial that it "indirectly contributed to private discrimination by awarding public contracts to firms that in turn discriminated against MBE and/or WBE subcontractors in other private portions of their business." <u>Id.</u> The City can demonstrate that it is a "'passive participant' in a system of racial exclusion practiced by elements of the local construction industry" by compiling evidence of marketplace discrimination and then linking its spending practices to the private discrimination. <u>Id.</u>, quoting <u>Croson</u>, 488 U.S. at 492.

The court rejected CWC's argument that the lending discrimination studies and business formation studies presented by Denver were irrelevant. In <u>Adarand VII</u>, the court concluded that evidence of discriminatory barriers to the formation of businesses by minorities and women and fair competition between MBE/WBEs and majority-owned construction firms shows a "strong link" between a government's "disbursements of public funds for construction contracts and the channeling of those funds due to private discrimination." <u>Id.</u> at 977, quoting <u>Adarand VII</u>, 228 F.3d at 1167-68. The court found that evidence that private discrimination resulted in barriers to business formation is relevant because it demonstrates that MBE/WBEs are precluded *at the outset* from competing for public construction contracts. The court also found that evidence of barriers to fair competition is relevant because it again demonstrates that *existing* MBE/WBEs are precluded from competing for public contracts. Thus, like the studies measuring disparities in the utilization of MBE/WBEs in the Denver MSA construction industry, studies showing that discriminatory barriers to business

formation exist in the Denver construction industry are relevant to the City's showing that it indirectly participates in industry discrimination. <u>Id.</u> at 977.

The City presented evidence of lending discrimination to support its position that MBE/WBEs in the Denver MSA construction industry face discriminatory barriers to business formation. Denver introduced a disparity study prepared in 1996 and sponsored by the Denver Community Reinvestment Alliance, Colorado Capital Initiatives, and the City. The Study ultimately concluded that "despite the fact that loan applicants of three different racial/ethnic backgrounds in this sample were not appreciably different as businesspeople, they were ultimately treated differently by the lenders on the crucial issue of loan approval or denial." <u>Id.</u> at 977-78. In <u>Adarand VII</u>, the court concluded that this study, among other evidence, "strongly support[ed] an initial showing of discrimination in lending." <u>Id.</u> at 978, quoting, <u>Adarand VII</u>, 228 F.3d at 1170, n. 13 ("Lending discrimination alone of course does not justify action in the construction market. However, the persistence of such discrimination ... supports the assertion that the formation, as well as utilization, of minority-owned construction enterprises has been impeded."). The City also introduced anecdotal evidence of lending discrimination in the Denver construction industry.

CWC did not present any evidence that undermined the reliability of the lending discrimination evidence but simply repeated the argument, foreclosed by circuit precedent, that it is irrelevant. The court rejected the district court criticism of the evidence because it failed to determine whether the discrimination resulted from discriminatory attitudes or from the neutral application of banking regulations. The court concluded, that discriminatory motive can be inferred from the results shown in disparity studies. The court held the district court's criticism did not undermine the study's reliability as an indicator that the City is passively participating in marketplace discrimination. The court noted that, in <u>Adarand VII</u> it took "judicial notice of the obvious causal connection between access to capital and ability to implement public works construction projects." <u>Id.</u> at 978, quoting <u>Adarand VII</u>, 228 F.3d at 1170.

Denver also introduced evidence of discriminatory barriers to competition faced by MBE/WBEs in the form of business formation studies. The 1990 Study and the 1995 Study both showed that all minority groups in the Denver MSA formed their own construction firms at rates lower than the total population but that women formed construction firms at higher rates. The 1997 Study examined self-employment rates and controlled for gender, marital status, education, availability of capital, and personal/family variables. As discussed, *supra*, the Study concluded that African Americans, Hispanics, and Native Americans working in the construction industry have lower rates of self-employment than similarly situated whites. Asian Americans had higher rates. The 1997 Study also concluded that minority and female business owners in the construction industry, with the exception of Asian American owners, have lower earnings than white male owners. This conclusion was reached after controlling for education, age, marital status, and disabilities. <u>Id.</u> at 978.

The court held that the district court's conclusion that the business formation studies could not be used to justify the ordinances conflicts with its holding in <u>Adarand VII</u>. "[T]he existence of evidence indicating that the number of [MBEs] would be significantly (but unquantifiably) higher but for such barriers is nevertheless relevant to the assessment of whether a disparity is sufficiently significant to give rise to an inference of discriminatory exclusion." <u>Id.</u> at 979, quoting <u>Adarand VII</u>,228 F.3d at 1174.

In sum, the court held the district court erred when it refused to consider or give sufficient weight to the lending discrimination study, the business formation studies, and the studies measuring marketplace discrimination. That evidence was legally relevant to the City's burden of demonstrating a strong basis in evidence to support its conclusion that remedial legislation was necessary. <u>Id.</u> at 979-80.

Variables. CWC challenged Denver's disparity studies as unreliable because the disparities shown in the studies may be attributable to firm size and experience rather than discrimination. Denver countered, however, that a firm's size has little effect on its qualifications or its ability to provide construction services and that MBE/WBEs, like all construction firms, can perform most services either by hiring additional employees or by employing subcontractors. CWC responded that elasticity itself is relative to size and experience; MBE/WBEs are less capable of expanding because they are smaller and less experienced. <u>Id.</u> at 980.

The court concluded that even if it assumed that MBE/WBEs are less able to expand because of their smaller size and more limited experience, CWC did not respond to Denver's argument and the evidence it presented showing that experience and size are not race- and gender-neutral variables and that MBE/WBE construction firms are generally smaller and less experienced *because* of industry discrimination. <u>Id.</u> at 981. The lending discrimination and business formation studies, according to the court, both strongly supported Denver's argument that MBE/WBEs are smaller and less experienced because of marketplace and industry discrimination. In addition, Denver's expert testified that discrimination by banks or bonding companies would reduce a firm's revenue and the number of employees it could hire. <u>Id.</u>

Denver also argued its Studies controlled for size and the 1995 Study controlled for experience. It asserted that the 1990 Study measured revenues per employee for construction for MBE/WBEs and concluded that the resulting disparities, "suggest[] that even among firms of the same employment size, industry utilization of MBEs and WBEs was lower than that of non-minority male-owned firms." <u>Id.</u> at 982. Similarly, the 1995 Study controlled for size, calculating, *inter alia*, disparity indices for firms with no paid employees which presumably are the same size.

Based on the uncontroverted evidence presented at trial, the court concluded that the district court did not give sufficient weight to Denver's disparity studies because of its erroneous conclusion that the studies failed to adequately control for size and experience. The court held that Denver is permitted to make assumptions about capacity and qualification of MBE/WBEs to perform construction services if it can support those assumptions. The court found the assumptions made in this case were consistent with the evidence presented at trial and supported the City's position that a firm's size does not affect its qualifications, willingness, or ability to perform construction services and that the smaller size and lesser experience of MBE/WBEs are, themselves, the result of industry discrimination. Further, the court pointed out CWC did not conduct its own disparity study using marketplace data and thus did not demonstrate that the disparities shown in Denver's studies would decrease or disappear if the studies controlled for size and experience to CWC's satisfaction. Consequently, the court held CWC's rebuttal evidence was insufficient to meet its burden of discrediting Denver's disparity studies on the issue of size and experience. Id. at 982.

Specialization. The district court also faulted Denver's disparity studies because they did not control for firm specialization. The court noted the district court's criticism would be appropriate only if there was evidence that MBE/WBEs are more likely to specialize in certain construction fields. <u>Id.</u> at 982.

The court found there was no identified evidence showing that certain construction specializations require skills less likely to be possessed by MBE/WBEs. The court found relevant the testimony of the City's expert, that the data he reviewed showed that MBEs were represented "widely across the different [construction] specializations." <u>Id.</u> at 982-83. There was no contrary testimony that aggregation bias caused the disparities shown in Denver's studies. <u>Id.</u> at 983.

The court held that CWC failed to demonstrate that the disparities shown in Denver's studies are eliminated when there is control for firm specialization. In contrast, one of the Denver studies, which controlled for SIC-code subspecialty and still showed disparities, provided support for Denver's argument that firm specialization does not explain the disparities. <u>Id.</u> at 983.

The court pointed out that disparity studies may make assumptions about availability as long as the same assumptions can be made for all firms. <u>Id.</u> at 983.

Utilization of MBE/WBEs on City projects. CWC argued that Denver could not demonstrate a compelling interest because it overutilized MBE/WBEs on City construction projects. This argument, according to the court, was an extension of CWC's argument that Denver could justify the ordinances only by presenting evidence of discrimination by the City itself or by contractors while working on City projects. Because the court concluded that Denver could satisfy its burden by showing that it is an indirect participant in industry discrimination, CWC's argument relating to the utilization of MBE/WBEs on City projects goes only to the weight of Denver's evidence. <u>Id.</u> at 984.

Consistent with the court's mandate in <u>Concrete Works II</u>, at trial Denver sought to demonstrate that the utilization data from projects subject to the goals program were tainted by the program and "reflect[ed] the intended remedial effect on MBE and WBE utilization." <u>Id.</u> at 984, quoting <u>Concrete Works II</u>, 36 F.3d at 1526. Denver argued that the non-goals data were the better indicator of past discrimination in public contracting than the data on all City construction projects. <u>Id.</u> at 984-85. The court concluded that Denver presented ample evidence to support the conclusion that the evidence showing MBE/WBE utilization on City projects not subject to the ordinances or the goals programs is the better indicator of discrimination in City contracting. <u>Id.</u> at 985.

The court rejected CWC's argument that the marketplace data were irrelevant but agreed that the non-goals data were also relevant to Denver's burden. The court noted that Denver did not rely heavily on the non-goals data at trial but focused primarily on the marketplace studies to support its burden. <u>Id.</u> at 985.

In sum, the court held Denver demonstrated that the utilization of MBE/WBEs on City projects had been affected by the affirmative action programs that had been in place in one form or another since 1977. Thus, the non-goals data were the better indicator of discrimination in public contracting. The court concluded that, on balance, the non-goals data provided some support for Denver's position that racial and gender discrimination existed in public contracting before the enactment of the ordinances. <u>Id.</u> at 987-88.

Anecdotal evidence. The anecdotal evidence, according to the court, included several incidents involving profoundly disturbing behavior on the part of lenders, majority-owned firms, and individual employees. <u>Id.</u> at 989. The court found that the anecdotal testimony revealed behavior that was not merely sophomoric or insensitive, but which resulted in real economic or physical harm. While CWC also argued that all new or small contractors have difficulty obtaining credit and that treatment the witnesses characterized as discriminatory is experienced by all contractors, Denver's witnesses specifically testified that they believed the incidents they experienced were motivated by race or gender discrimination. The court found they supported those beliefs with testimony that majority-owned firms were not subject to the same requirements imposed on them. <u>Id.</u>

The court held there was no merit to CWC's argument that the witnesses' accounts must be verified to provide support for Denver's burden. The court stated that anecdotal evidence is nothing more than a witness' narrative of an incident told from the witness' perspective and including the witness' perceptions. <u>Id.</u>

After considering Denver's anecdotal evidence, the district court found that the evidence "shows that race, ethnicity and gender affect the construction industry and those who work in it" and that the egregious mistreatment of minority and women employees "had direct financial consequences" on construction firms. <u>Id.</u> at 989, quoting <u>Concrete Works III</u>, 86 F. Supp. 2d at 1074, 1073. Based on the district court's findings regarding Denver's anecdotal evidence and its review of the record, the court concluded that the anecdotal evidence provided persuasive, unrebutted support for Denver's initial burden. <u>Id.</u> at 989-90, citing <u>Int'l Bhd. of Teamsters v. United States</u>, 431 U.S. 324, 339 (1977) (concluding that anecdotal evidence presented in a pattern or practice discrimination case was persuasive because it "brought the cold [statistics] convincingly to life").

Summary. The court held the record contained extensive evidence supporting Denver's position that it had a strong basis in evidence for concluding that the 1990 Ordinance and the 1998 Ordinance were necessary to remediate discrimination against both MBEs and WBEs. <u>Id.</u> at 990. The information available to Denver and upon which the ordinances were predicated, according to the court, indicated that discrimination was persistent in the local construction industry and that Denver was, at least, an indirect participant in that discrimination.

To rebut Denver's evidence, the court stated CWC was required to "establish that Denver's evidence did not constitute strong evidence of such discrimination." <u>Id.</u> at 991, quoting <u>Concrete Works II</u>, 36 F.3d at 1523. CWC could not meet its burden of proof through conjecture and unsupported criticisms of Denver's evidence. Rather, it must present "credible, particularized evidence." <u>Id.</u>, quoting <u>Adarand VII</u>, 228 F.3d at 1175. The court held that CWC did not meet its burden. CWC *hypothesized* that the disparities shown in the studies on which Denver relies could be explained by any number of factors other than racial discrimination. However, the court found it did not conduct its own marketplace disparity study controlling for the disputed variables and presented no other evidence from which the court could conclude that such variables explain the disparities. <u>Id.</u> at 991-92.

Narrow tailoring. Having concluded that Denver demonstrated a compelling interest in the race-based measures and an important governmental interest in the gender-based measures, the court held it must examine whether the ordinances were narrowly tailored to serve the compelling interest and are substantially related to the achievement of the important governmental interest. <u>Id.</u> at 992.

The court stated it had previously concluded in its earlier decisions that Denver's program was narrowly tailored. CWC appealed the grant of summary judgment and that appeal culminated in the decision in Concrete Works II. The court reversed the grant of summary judgment on the compelling-interest issue and concluded that CWC had waived any challenge to the narrow tailoring conclusion reached by the district court. Because the court found Concrete Works did not challenge the district court's conclusion with respect to the second prong of Croson's strict scrutiny standard — i.e., that the Ordinance is narrowly tailored to remedy past and present discrimination — the court held it need not address this issue. Id. at 992, citing Concrete Works II, 36 F.3d at 1531, n. 24.

The court concluded that the district court lacked authority to address the narrow tailoring issue on remand because none of the exceptions to the law of the case doctrine are applicable. The district court's earlier determination that Denver's affirmative-action measures were narrowly tailored is law of the case and binding on the parties.

3. <u>Kornhass Construction, Inc. v. State of Oklahoma, Department of</u> Central Services, 140 F.Supp.2d 1232 (W.D. OK. 2001)

Plaintiffs, non-minority contractors, brought this action against the State of Oklahoma challenging minority bid preference provisions in the Oklahoma Minority Business Enterprise Assistance Act ("MBE Act"). The Oklahoma MBE Act established a bid preference program by which certified minority business enterprises are given favorable treatment on competitive bids submitted to the state. 140 F.Supp.2d at 1235–36. Under the MBE Act, the bids of non-minority contractors were raised by 5 percent, placing them at a competitive disadvantage according to the district court. <u>Id</u>. at 1235–1236.

The named plaintiffs bid on state contracts in which their bids were increased by 5 percent as they were non-minority business enterprises. Although the plaintiffs actually submitted the lowest dollar bids, once the 5 percent factor was applied, minority bidders became the successful bidders on certain contracts. 140 F.Supp. at 1237.

In determining the constitutionality or validity of the Oklahoma MBE Act, the district court was guided in its analysis by the Tenth Circuit Court of Appeals decision in <u>Adarand Constructors, Inc. v. Slater</u>, 288 F.3d 1147 (10th Cir. 2000) ("Adarand VII"). The district court pointed out that in <u>Adarand VII</u>, the Tenth Circuit found compelling evidence of barriers to both minority business formation and existing minority businesses. <u>Id</u>. at 1238. In sum, the district court noted that the Tenth Circuit concluded that the Government had met its burden of presenting a strong basis in evidence sufficient to support its articulated, constitutionally valid, compelling interest. 140 F.Supp. 2d at 1239, citing <u>Adarand VII</u>, 228 F.3d 1147, 1174.

Compelling state interest. The district court, following <u>Adarand VII</u>, applied the strict scrutiny analysis, arising out of the Fourteenth Amendment's Equal Protection Clause, in which a race-based affirmative action program withstands strict scrutiny only if it is narrowly tailored to serve a compelling governmental interest. <u>Id</u>. at 1239. The district court pointed out that it is clear from Supreme Court precedent, there may be a compelling interest sufficient to justify race-conscious affirmative action measures. <u>Id</u>. The Fourteenth Amendment permits race-conscious programs that seek both to eradicate discrimination by the governmental entity itself and to prevent the governmental entity from becoming a "passive participant" in a system of racial exclusion practiced

by private businesses. <u>Id.</u> at 1240. Therefore, the district court concluded that both the federal and state governments have a compelling interest assuring that public dollars do not serve to finance the evil of private prejudice. <u>Id.</u>

The district court stated that a "mere statistical disparity in the proportion of contracts awarded to a particular group, standing alone, does not demonstrate the evil of private or public racial prejudice." Id. Rather, the court held that the "benchmark for judging the adequacy of a state's factual predicate for affirmative action legislation is whether there exists a strong basis in the evidence of the state's conclusion that remedial action was necessary." Id. The district court found that the Supreme Court made it clear that the state bears the burden of demonstrating a strong basis in evidence for its conclusion that remedial action was necessary by proving either that the state itself discriminated in the past or was "a passive participant" in private industry's discriminatory practices. Id. at 1240, citing to Associated General Contractors of Ohio, Inc. v. Drabik, 214 F.3d 730, 735 (6th Cir. 2000) and City of Richmond v. J.A. Croson Company, 488 U.S. 469 at 486-492 (1989).

With this background, the State of Oklahoma stated that its compelling state interest "is to promote the economy of the State and to ensure that minority business enterprises are given an opportunity to compete for state contracts." <u>Id</u>. at 1240. Thus, the district court found the State admitted that the MBE Act's bid preference "is not based on past discrimination," rather, it is based on a desire to "encourag[e] economic development of minority business enterprises which in turn will benefit the State of Oklahoma as a whole." <u>Id</u>. In light of <u>Adarand VII</u>, and prevailing Supreme Court case law, the district court found that this articulated interest is not "compelling" in the absence of evidence of past or present racial discrimination. <u>Id</u>.

The district court considered testimony presented by Intervenors who participated in the case for the defendants and asserted that the Oklahoma legislature conducted an interim study prior to adoption of the MBE Act, during which testimony and evidence were presented to members of the Oklahoma Legislative Black Caucus and other participating legislators. The study was conducted more than 14 years prior to the case and the Intervenors did not actually offer any of the evidence to the court in this case. The Intervenors submitted an affidavit from the witness who serves as the Title VI Coordinator for the Oklahoma Department of Transportation. The court found that the affidavit from the witness averred in general terms that minority businesses were discriminated against in the awarding of state contracts. The district court found that the Intervenors have not produced — or indeed even described — the evidence of discrimination. <u>Id</u>. at 1241. The district court found that it cannot be discerned from the documents which minority businesses were the victims of discrimination, or which racial or ethnic groups were targeted by such alleged discrimination. <u>Id</u>.

The court also found that the Intervenors' evidence did not indicate what discriminatory acts or practices allegedly occurred, or when they occurred. <u>Id.</u> The district court stated that the Intervenors did not identify "a single qualified, minority-owned bidder who was excluded from a state contract." <u>Id.</u> The district court, thus, held that broad allegations of "systematic" exclusion of minority businesses were not sufficient to constitute a compelling governmental interest in remedying past or current discrimination. <u>Id.</u> at 1242. The district court stated that this was particularly true in light of the "State's admission here that the State's governmental interest was not in remedying past discrimination in the state competitive bidding process, but in 'encouraging economic development of minority business enterprises which in turn will benefit the State of Oklahoma as a whole." <u>Id.</u> at 1242.

The court found that the State defendants failed to produce any admissible evidence of a single, specific discriminatory act, or any substantial evidence showing a pattern of deliberate exclusion from state contracts of minority-owned businesses. <u>Id.</u> at 1241 - 1242, footnote 11.

The district court also noted that the Sixth Circuit Court of Appeals in <u>Drabik</u> rejected Ohio's statistical evidence of underutilization of minority contractors because the evidence did not report the actual use of minority firms; rather, they reported only the use of those minority firms that had gone to the trouble of being certified and listed by the state. <u>Id.</u> at 1242, footnote 12. The district court stated that, as in <u>Drabik</u>, the evidence presented in support of the Oklahoma MBE Act failed to account for the possibility that some minority contractors might not register with the state, and the statistics did not account for any contracts awarded to businesses with minority ownership of less than 51 percent, or for contracts performed in large part by minority-owned subcontractors where the prime contractor was not a certified minority-owned business. <u>Id.</u>

The district court found that the MBE Act's minority bidding preference was not predicated upon a finding of discrimination in any particular industry or region of the state, or discrimination against any particular racial or ethnic group. The court stated that there was no evidence offered of actual discrimination, past or present, against the specific racial and ethnic groups to whom the preference was extended, other than an attempt to show a history of discrimination against African Americans. Id. at 1242.

Narrow tailoring. The district court found that even if the State's goals could be considered "compelling," the State did not show that the MBE Act was narrowly tailored to serve those goals. The court pointed out that the Tenth Circuit in <u>Adarand VII</u> identified six factors the court must consider in determining whether the MBE Act's minority preference provisions were sufficiently narrowly tailored to satisfy equal protection: (1) the availability of race-neutral alternative remedies; (2) limits on the duration of the challenged preference provisions; (3) flexibility of the preference provisions; (4) numerical proportionality; (5) the burden on third parties; and (6) over- or underinclusiveness. Id. at 1242-1243.

First, in terms of race-neutral alternative remedies, the court found that the evidence offered showed, at most, that nominal efforts were made to assist minority-owned businesses prior to the adoption of the MBE Act's racial preference program. Id. at 1243. The court considered evidence regarding the Minority Assistance Program, but found that to be primarily informational services only, and was not designed to actually assist minorities or other disadvantaged contractors to obtain contracts with the State of Oklahoma. Id. at 1243. In contrast to this "informational" program, the court noted the Tenth Circuit in <u>Adarand VII</u> favorably considered the federal government's use of racially neutral alternatives aimed at disadvantaged businesses, including assistance with obtaining project bonds, assistance with securing capital financing, technical assistance, and other programs designed to assist start-up businesses. Id. at 1243 citing <u>Adarand VII</u>, 228 F.3d at 1178-1179.

The district court found that it does not appear from the evidence that Oklahoma's Minority Assistance Program provided the type of race-neutral relief required by the Tenth Circuit in <u>Adarand VII</u>, in the Supreme Court in the <u>Croson</u> decision, nor does it appear that the Program was racially neutral. Id. at 1243. The court found that the State of Oklahoma did not show any meaningful form of assistance to new or disadvantaged businesses prior to the adoption of the MBE Act, and thus, the court found that the state defendants had not shown that Oklahoma considered race-neutral

alternative means to achieve the state's goal prior to adoption of the minority bid preference provisions. Id. at 1243.

In a footnote, the district court pointed out that the Tenth Circuit has recognized racially neutral programs designed to assist <u>all</u> new or financially disadvantaged businesses in obtaining government contracts tend to benefit minority-owned businesses, and can help alleviate the effects of past and present-day discrimination. <u>Id</u>. at 1243, footnote 15 citing <u>Adarand VII</u>.

The court considered the evidence offered of post-enactment efforts by the State to increase minority participation in State contracting. The court found that most of these efforts were directed toward encouraging the participation of certified minority business enterprises, "and are thus not racially neutral. This evidence fails to demonstrate that the State employed race-neutral alternative measures prior to or after adopting the Minority Business Enterprise Assistance Act." Id. at 1244. Some of the efforts the court found were directed toward encouraging the participation of certified minority business enterprises and thus not racially neutral, included mailing vendor registration forms to minority vendors, telephoning and mailing letters to minority vendors, providing assistance to vendors in completing registration forms, assuring the vendors received bid information, preparing a minority business directory and distributing it to all state agencies, periodically mailing construction project information to minority vendors, and providing commodity information to minority vendors upon request. Id. at 1244, footnote 16.

In terms of durational limits and flexibility, the court found that the "goal" of 10 percent of the state's contracts being awarded to certified minority business enterprises had never been reached, or even approached, during the thirteen years since the MBE Act was implemented. <u>Id</u>. at 1244. The court found the defendants offered no evidence that the bid preference was likely to end at any time in the foreseeable future, or that it is otherwise limited in its duration. <u>Id</u>. Unlike the federal programs at issue in <u>Adarand VII</u>, the court stated the Oklahoma MBE Act has no inherent time limit, and no provision for disadvantaged minority-owned businesses to "graduate" from preference eligibility. <u>Id</u>. The court found the MBE Act was not limited to those minority-owned businesses which are shown to be economically disadvantaged. <u>Id</u>.

The court stated that the MBE Act made no attempt to address or remedy any actual, demonstrated past or present racial discrimination, and the MBE Act's duration was not tied in any way to the eradication of such discrimination. <u>Id</u>. Instead, the court found the MBE Act rests on the "questionable assumption that 10 percent of all state contract dollars should be awarded to certified minority-owned and operated businesses, without any showing that this assumption is reasonable." <u>Id</u>. at 1244.

By the terms of the MBE Act, the minority preference provisions would continue in place for five years after the goal of 10 percent minority participation was reached, and thus the district court concluded that the MBE Act's minority preference provisions lacked reasonable durational limits. <u>Id.</u> at 1245.

With regard to the factor of "numerical proportionality" between the MBE Act's aspirational goal and the number of existing available minority-owned businesses, the court found the MBE Act's 10 percent goal was not based upon demonstrable evidence of the availability of minority contractors who were either qualified to bid or who were ready, willing and able to become qualified to bid on

state contracts. <u>Id</u>. at 1246–1247. The court pointed out that the MBE Act made no attempt to distinguish between the four minority racial groups, so that contracts awarded to members of all of the preferred races were aggregated in determining whether the 10 percent aspirational goal had been reached. <u>Id</u>. at 1246. In addition, the court found the MBE Act aggregated all state contracts for goods and services, so that minority participation was determined by the total number of dollars spent on state contracts. <u>Id</u>.

The court stated that in <u>Adarand VII</u>, the Tenth Circuit rejected the contention that the aspirational goals were required to correspond to an actual finding as to the number of existing minority-owned businesses. <u>Id</u>. at 1246. The court noted that the government submitted evidence in <u>Adarand VII</u>, that the effects of past discrimination had excluded minorities from entering the construction industry, and that the number of available minority subcontractors reflected that discrimination. <u>Id</u>. In light of this evidence, the district court said the Tenth Circuit held that the existing percentage of minority-owned businesses is "not necessarily an absolute cap" on the percentage that a remedial program might legitimately seek to achieve. <u>Id</u>. at 1246, citing <u>Adarand VII</u>, 228 F.3d at 1181.

Unlike <u>Adarand VII</u>, the court found that the Oklahoma State defendants did not offer "substantial evidence" that the minorities given preferential treatment under the MBE Act were prevented, through past discrimination, from entering any particular industry, or that the number of available minority subcontractors in that industry reflects that discrimination. 140 F.Supp.2d at 1246. The court concluded that the Oklahoma State defendants did not offer any evidence of the number of minority-owned businesses doing business in any of the many industries covered by the MBE Act. <u>Id</u>. at 1246–1247.

With regard to the impact on third parties factor, the court pointed out the Tenth Circuit in Adarand VII stated the mere possibility that innocent parties will share the burden of a remedial program is itself insufficient to warrant the conclusion that the program is not narrowly tailored. Id. at 1247. The district court found the MBE Act's bid preference provisions prevented non-minority businesses from competing on an equal basis with certified minority business enterprises, and that in some instances plaintiffs had been required to lower their intended bids because they knew minority firms were bidding. Id. The court pointed out that the 5 percent preference is applicable to all contracts awarded under the state's Central Purchasing Act with no time limitation. Id.

In terms of the "under- and over-inclusiveness" factor, the court observed that the MBE Act extended its bidding preference to several racial minority groups without regard to whether each of those groups had suffered from the effects of past or present racial discrimination. <u>Id</u>. at 1247. The district court reiterated the Oklahoma State defendants did not offer any evidence at all that the minority racial groups identified in the Act had actually suffered from discrimination. <u>Id</u>.

Second, the district court found the MBE Act's bidding preference extends to all contracts for goods and services awarded under the State's Central Purchasing Act, without regard to whether members of the preferred minority groups had been the victims of past or present discrimination within that particular industry or trade. <u>Id</u>.

Third, the district court noted the preference extends to all businesses certified as minority-owned and controlled, without regard to whether a particular business is economically or socially disadvantaged, or has suffered from the effects of past or present discrimination. <u>Id</u>. The court thus

found that the factor of over-inclusiveness weighs against a finding that the MBE Act was narrowly tailored. <u>Id</u>.

The district court in conclusion found that the Oklahoma MBE Act violated the Constitution's Fifth Amendment guarantee of equal protection and granted the plaintiffs' Motion for Summary Judgment.

E. Recent Decisions Involving the Federal DBE Program and Federally-Funded Projects in Other Jurisdictions

There are several recent and pending cases involving challenges to the United States Federal DBE Program and its implementation by the states and their governmental entities for federally-funded projects. These cases could have a significant impact on the nature and provisions of contracting and procurement on federally-funded projects, including and relating to the utilization of DBEs. In addition, these cases provide an instructive analysis of the recent application of the strict scrutiny test to MBE/WBE- and DBE-type programs.

1. Northern Contracting, Inc. v. Illinois, 473 F.3d 715 (7th Cir. 2007).

In Northern Contracting, Inc. v. Illinois, the Seventh Circuit affirmed the district court decision upholding the validity and constitutionality of the Illinois Department of Transportation's ("IDOT") DBE Program. Plaintiff Northern Contracting Inc. ("NCI") was a white male-owned construction company specializing in the construction of guardrails and fences for highway construction projects in Illinois. 473 F.3d 715, 717 (7th Cir. 2007). Initially, NCI challenged the constitutionality of both the federal regulations and the Illinois statute implementing these regulations. <u>Id.</u> at 719. The district court granted the USDOT's Motion for Summary Judgment, concluding that the federal government had demonstrated a compelling interest and that TEA-21 was sufficiently narrowly tailored. NCI did not challenge this ruling and thereby forfeited the opportunity to challenge the federal regulations. <u>Id.</u> at 720. NCI also forfeited the argument that IDOT's DBE program did not serve a compelling government interest. <u>Id.</u> The sole issue on appeal to the Seventh Circuit was whether IDOT's program was narrowly tailored. <u>Id.</u>

IDOT typically adopted a new DBE plan each year. <u>Id.</u> at 718. In preparing for Fiscal Year 2005, IDOT retained a consulting firm to determine DBE availability. <u>Id.</u> The consultant first identified the relevant geographic market (Illinois) and the relevant product market (transportation infrastructure construction). <u>Id.</u> The consultant then determined availability of minority- and women-owned firms through analysis of Dun & Bradstreet's Marketplace data. <u>Id.</u> This initial list was corrected for errors in the data by surveying the D&B list. <u>Id.</u> In light of these surveys, the consultant arrived at a DBE availability of 22.77 percent. <u>Id.</u> The consultant then ran a regression analysis on earnings and business information and concluded that in the absence of discrimination, relative DBE availability would be 27.5 percent. <u>Id.</u> IDOT considered this, along with other data, including DBE utilization on IDOTs "zero goal" experiment conducted in 2002 to 2003, in which IDOT did not use DBE goals on 5 percent of its contracts (1.5% utilization) and data of DBE utilization on projects for the Illinois State Toll Highway Authority which does not receive federal funding and whose goals are completely voluntary (1.6% utilization). <u>Id.</u> at 719. On the basis of all of this data, IDOT adopted a 22.77 percent goal for 2005. <u>Id.</u>

Despite the fact the NCI forfeited the argument that IDOT's DBE program did not serve a compelling state interest, the Seventh Circuit briefly addressed the compelling interest prong of the strict scrutiny analysis, noting that IDOT had satisfied its burden. <u>Id.</u> at 720. The court noted that, post-<u>Adarand</u>, two other circuits have held that a state may rely on the federal government's compelling interest in implementing a local DBE plan. <u>Id.</u> at 720-21, citing <u>Western States Paving Co., Inc. v. Washington State DOT</u>, 407 F.3d 983, 987 (9th Cir. 2005), <u>cert. denied</u>, 126 S.Ct. 1332 (Feb. 21, 2006) and <u>Sherbrooke Turf, Inc. v. Minnesota DOT</u>, 345 F.3d 964, 970 (8th Cir. 2003),

cert. denied, 541 U.S. 1041 (2004). The court stated that NCI had not articulated any reason to break ranks from the other circuits and explained that "[i]nsofar as the state is merely complying with federal law it is acting as the agent of the federal government If the state does exactly what the statute expects it to do, and the statute is conceded for purposes of litigation to be constitutional, we do not see how the state can be thought to have violated the Constitution." <u>Id.</u> at 721, quoting <u>Milwaukee County Pavers Association v. Fielder</u>, 922 F.2d 419, 423 (7th Cir. 1991). The court did not address whether IDOT had an independent interest that could have survived constitutional scrutiny.

In addressing the narrowly tailored prong with respect to IDOT's DBE program, the court held that IDOT had complied. <u>Id.</u> The court concluded its holding in <u>Milwaukee</u> that a state is insulated from a constitutional attack absent a showing that the state exceeded its federal authority remained applicable. <u>Id.</u> at 721-22. The court noted that the Supreme Court in <u>Adarand Constructors v. Pena</u>, 515 U.S. 200 (1995) did not seize the opportunity to overrule that decision, explaining that the Court did not invalidate its conclusion that a challenge to a state's application of a federally mandated program must be limited to the question of whether the state exceeded its authority. <u>Id.</u> at 722.

The court further clarified the <u>Milwaukee</u> opinion in light of the interpretations of the opinions offered in by the Ninth Circuit in <u>Western States</u> and Eighth Circuit in <u>Sherbrooke</u>. <u>Id.</u> The court stated that the Ninth Circuit in <u>Western States</u> misread the <u>Milwaukee</u> decision in concluding that <u>Milwaukee</u> did not address the situation of an as-applied challenge to a DBE program. <u>Id.</u> at 722, n.5. Relatedly, the court stated that the Eighth Circuit's opinion in <u>Sherbrooke</u> (that the <u>Milwaukee</u> decision was compromised by the fact that it was decided under the prior law "when the 10 percent federal set-aside was more mandatory") was unconvincing since all recipients of federal transportation funds are still required to have compliant DBE programs. <u>Id.</u> at 722. Federal law makes more clear now that the compliance could be achieved even with no DBE utilization if that were the result of a good faith use of the process. <u>Id.</u> at 722, n.5. The court stated that IDOT in this case was acting as an instrument of federal policy and NCI's collateral attack on the federal regulations was impermissible. <u>Id.</u> at 722.

The remainder of the court's opinion addressed the question of whether IDOT exceeded its grant of authority under federal law, and held that all of NCI's arguments failed. <u>Id.</u> First, NCI challenged the method by which the local base figure was calculated, the first step in the goal-setting process. <u>Id.</u> NCI argued that the number of registered and prequalified DBEs in Illinois should have simply been counted. <u>Id.</u> The court stated that while the federal regulations list several examples of methods for determining the local base figure, <u>Id.</u> at 723, these examples are not intended as an exhaustive list. The court pointed out that the fifth item in the list is entitled "Alternative Methods," and states: "You may use other methods to determine a base figure for your overall goal. Any methodology you choose must be based on demonstrable evidence of local market conditions and be designated to ultimately attain a goal that is rationally related to the relative availability of DBEs in your market." <u>Id.</u> (citing 49 C.F.R. § 26.45©(5)). According to the court, the regulations make clear that "relative availability" means "the availability of ready, willing and able DBEs relative to all business ready, willing, and able to participate" on DOT contracts. <u>Id.</u> The court stated NCI pointed to nothing in the federal regulations that indicated that a recipient must so narrowly define the scope of the ready, willing, and available firms to a simple count of the number of registered and prequalifed DBEs. <u>Id.</u>

The court agreed with the district court that the remedial nature of the federal scheme militates in favor of a method of DBE availability calculation that casts a broader net. <u>Id.</u>

Second, NCI argued that the IDOT failed to properly adjust its goal based on local market conditions. <u>Id.</u> The court noted that the federal regulations do not require any adjustments to the base figure, but simply provide recipients with authority to make such adjustments if necessary. <u>Id.</u> According to the court, NCI failed to identify any aspect of the regulations requiring IDOT to separate prime contractor availability from subcontractor availability, and pointed out that the regulations require the local goal to be focused on overall DBE participation. <u>Id.</u>

Third, NCI contended that IDOT violated the federal regulations by failing to meet the maximum feasible portion of its overall goal through race-neutral means of facilitating DBE participation. <u>Id.</u> at 723-24. NCI argued that IDOT should have considered DBEs who had won subcontracts on goal projects where the prime contractor did not consider DBE status, instead of only considering DBEs who won contracts on no-goal projects. <u>Id.</u> at 724. The court held that while the regulations indicate that where DBEs win subcontracts on goal projects strictly through low bid this can be counted as race-neutral participation, the regulations did not require IDOT to search for this data, for the purpose of calculating past levels of race-neutral DBE participation. <u>Id.</u> According to the court, the record indicated that IDOT used nearly all the methods described in the regulations to maximize the portion of the goal that will be achieved through race-neutral means. <u>Id.</u>

The court affirmed the decision of the district court upholding the validity of the IDOT DBE program and found that it was narrowly tailored to further a compelling governmental interest. <u>Id.</u>

Northern Contracting, Inc. v. Illinois, 2005 WL 2230195 (N.D. Ill. Sept. 8, 2005), aff'd 473 F.3d 715 (7th Cir. 2007).

This decision is the district court's order that was affirmed by the Seventh Circuit Court of Appeals. This decision is instructive in that it is one of the recent cases to address the validity of the Federal DBE Program and local and state governments' implementation of the program as recipients of federal funds. The case also is instructive in that the court set forth a detailed analysis of race-, ethnicity-, and gender-neutral measures as well as evidentiary data required to satisfy constitutional scrutiny.

The district court conducted a trial after denying the parties' Motions for Summary Judgment in Northern Contracting, Inc. v. State of Illinois, Illinois DOT, and USDOT, 2004 WL 422704 (N.D. Ill. March 3, 2004), discussed infra. The following summarizes the opinion of the district court.

Northern Contracting, Inc. (the "plaintiff"), an Illinois highway contractor, sued the State of Illinois, the Illinois DOT, the United States DOT, and federal and state officials seeking a declaration that federal statutory provisions, the federal implementing regulations ("TEA-21"), the state statute authorizing the DBE program, and the Illinois DBE program itself were unlawful and unconstitutional. 2005 WL 2230195 at *1 (N.D. Ill. Sept, 8, 2005).

Under TEA-21, a recipient of federal funds is required to meet the "maximum feasible portion" of its DBE goal through race-neutral means. <u>Id.</u> at *4 (citing regulations). If a recipient projects that it cannot meet its overall DBE goal through race-neutral means, it must establish contract goals to the extent necessary to achieve the overall DBE goal. <u>Id.</u> (citing regulation). [The court provided an

overview of the pertinent regulations including compliance requirements and qualifications for DBE status.]

Statistical evidence. To calculate its 2005 DBE participation goals, IDOT followed the two-step process set forth in TEA-21: (1) calculation of a base figure for the relative availability of DBEs, and (2) consideration of a possible adjustment of the base figure to reflect the effects of the DBE program and the level of participation that would be expected but for the effects of past and present discrimination. <u>Id.</u> at *6. IDOT engaged in a study to calculate its base figure and conduct a custom census to determine whether a more reliable method of calculation existed as opposed to IDOT's previous method of reviewing a bidder's list. <u>Id.</u>

In compliance with TEA-21, IDOT used a study to evaluate the base figure using a six-part analysis: (1) the study identified the appropriate and relevant geographic market for IDOT's contracting activity and its prime contractors as the State of Illinois; (2) the study identified the relevant product markets in which IDOT and its prime contractors contract; (3) the study sought to identify all available contractors and subcontractors in the relevant industries within Illinois using Dun & Bradstreet's Marketplace; (4) the study collected lists of DBEs from IDOT and twenty other public and private agencies; (5) the study attempted to correct for the possibility that certain businesses listed as DBEs were no longer qualified or, alternatively, businesses not listed as DBEs but qualified as such under the federal regulations; and (6) the study attempted to correct for the possibility that not all DBE businesses were listed in the various directories. Id. at *6-7. The study utilized a standard statistical sampling procedure to correct for the latter two biases. Id. at *7. The study thus calculated a weighted average base figure of 22.7 percent. Id.

IDOT then adjusted the base figure based upon two disparity studies and some reports considering whether the DBE availability figures were artificially low due to the effects of past discrimination. <u>Id.</u> at *8. One study examined disparities in earnings and business formation rates as between DBEs and their white male-owned counterparts. <u>Id.</u> Another study included a survey reporting that DBEs are rarely utilized in non-goals projects. <u>Id.</u>

IDOT considered three reports prepared by expert witnesses. <u>Id.</u> at *9. The first report concluded that minority- and women-owned businesses were underutilized relative to their capacity and that such underutilization was due to discrimination. <u>Id.</u> The second report concluded, after controlling for relevant variables such as credit worthiness, "that minorities and women are less likely to form businesses, and that when they do form businesses, those businesses achieve lower earnings than did businesses owned by white males." <u>Id.</u> The third report, again controlling for relevant variables (education, age, marital status, industry and wealth), concluded that minority- and female-owned businesses formation rates are lower than those of their white male counterparts, and that such businesses engage in a disproportionate amount of government work and contracts as a result of their inability to obtain private sector work. <u>Id.</u>

IDOT also conducted a series of public hearings in which a number of DBE owners who testified that they "were rarely, if ever, solicited to bid on projects not subject to disadvantaged-firm hiring goals." <u>Id.</u> Additionally, witnesses identified twenty prime contractors in IDOT District 1 alone who rarely or never solicited bids from DBEs on non-goals projects. <u>Id.</u> The prime contractors did not respond to IDOT's requests for information concerning their utilization of DBEs. <u>Id.</u>

Finally, IDOT reviewed unremediated market data from four different markets (the Illinois State Toll Highway Authority, the Missouri DOT, Cook County's public construction contracts, and a "non-goals" experiment conducted by IDOT between 2001 and 2002), and considered past utilization of DBEs on IDOT projects. <u>Id.</u> at *11. After analyzing all of the data, the study recommended an upward adjustment to 27.51 percent, however, IDOT decided to maintain its figure at 22.77 percent. <u>Id.</u>

IDOT's representative testified that the DBE program was administered on a "contract-by-contract basis." <u>Id.</u> She testified that DBE goals have no effect on the award of prime contracts but that contracts are awarded exclusively to the "lowest responsible bidder." IDOT also allowed contractors to petition for a waiver of individual contract goals in certain situations (e.g., where the contractor has been unable to meet the goal despite having made reasonable good faith efforts). <u>Id.</u> at *12. Between 2001 and 2004, IDOT received waiver requests on 8.53 percent of its contracts and granted three out of four; IDOT also provided an appeal procedure for a denial from a waiver request. <u>Id.</u>

IDOT implemented a number of race- and gender-neutral measures both in its fiscal year 2005 plan and in response to the district court's earlier summary judgment order, including:

- 1. A "prompt payment provision" in its contracts, requiring that subcontractors be paid promptly after they complete their work, and prohibiting prime contractors from delaying such payments;
- 2. An extensive outreach program seeking to attract and assist DBE and other small firms DBE and other small firms enter and achieve success in the industry (including retaining a network of consultants to provide management, technical and financial assistance to small businesses, and sponsoring networking sessions throughout the state to acquaint small firms with larger contractors and to encourage the involvement of small firms in major construction projects);
- 3. Reviewing the criteria for prequalification to reduce any unnecessary burdens;
- 4. "Unbundling" large contracts; and
- 5. Allocating some contracts for bidding only by firms meeting the SBA's definition of small businesses.

<u>Id</u>. (internal citations omitted). IDOT was also in the process of implementing bonding and financing initiatives to assist emerging contractors obtain guaranteed bonding and lines of credit, and establishing a mentor-protégé program. <u>Id</u>.

The court found that IDOT attempted to achieve the "maximum feasible portion" of its overall DBE goal through race- and gender-neutral measures. Id. at *13. The court found that IDOT determined that race- and gender-neutral measures would account for 6.43 percent of its DBE goal, leaving 16.34 percent to be reached using race- and gender-conscious measures. Id.

Anecdotal evidence. A number of DBE owners testified to instances of perceived discrimination and to the barriers they face. Id. The DBE owners also testified to difficulties in obtaining work in the private sector and "unanimously reported that they were rarely invited to bid on such contracts." Id. The DBE owners testified to a reluctance to submit unsolicited bids due to the expense involved and identified specific firms that solicited bids from DBEs for goals projects but not for non-goals projects. Id. A number of the witnesses also testified to specific instances of discrimination in

bidding, on specific contracts, and in the financing and insurance markets. Id. at *13-14. One witness acknowledged that all small firms face difficulties in the financing and insurance markets, but testified that it is especially burdensome for DBEs who "frequently are forced to pay higher insurance rates due to racial and gender discrimination." Id. at *14. The DBE witnesses also testified they have obstacles in obtaining prompt payment. Id.

The plaintiff called a number of non-DBE business owners who unanimously testified that they solicit business equally from DBEs and non-DBEs on non-goals projects. Id. Some non-DBE firm owners testified that they solicit bids from DBEs on a goals project for work they would otherwise complete themselves absent the goals; others testified that they "occasionally award work to a DBE that was not the low bidder in order to avoid scrutiny from IDOT." Id. A number of non-DBE firm owners accused of failing to solicit bids from DBEs on non-goals projects, testified and denied the allegations. Id. at *15.

Strict scrutiny. The court applied strict scrutiny to the program as a whole (including the genderbased preferences). Id. at *16. The court, however, set forth a different burden of proof, finding that the government must demonstrate identified discrimination with specificity and must have a "strong basis in evidence' to conclude that remedial action was necessary, *before* it embarks on an affirmative action program ... If the government makes such a showing, the party challenging the affirmative action plan bears the 'ultimate burden' of demonstrating the unconstitutionality of the program." Id. The court held that challenging party's burden "can only be met by presenting credible evidence to rebut the government's proffered data." Id. at *17.

To satisfy strict scrutiny, the court found that IDOT did not need to demonstrate an independent compelling interest; however, as part of the narrowly tailored prong, IDOT needed to show "that there is a demonstrable need for the implementation of the Federal DBE Program within its jurisdiction." Id. at *16.

The court found that IDOT presented "an abundance" of evidence documenting the disparities between DBEs and non-DBEs in the construction industry. Id. at *17. The plaintiff argued that the study was "erroneous because it failed to limit its DBE availability figures to those firms ... registered and pre-qualified with IDOT." Id. The plaintiff also alleged the calculations of the DBE utilization rate were incorrect because the data included IDOT subcontracts and prime contracts, despite the fact that the latter are awarded to the lowest bidder as a matter of law. Id. Accordingly, the plaintiff alleged that IDOT's calculation of DBE availability and utilization rates was incorrect. Id.

The court found that other jurisdictions had utilized the custom census approach without successful challenge. Id. at *18. Additionally, the court found "that the remedial nature of the federal statutes counsels for the casting of a broader net when measuring DBE availability." Id. at *19. The court found that IDOT presented "an array of statistical studies concluding that DBEs face disproportionate hurdles in the credit, insurance, and bonding markets." Id. at *21. The court also found that the statistical studies were consistent with the anecdotal evidence. Id. The court did find, however, that "there was no evidence of even a single instance in which a prime contractor failed to award a job to a DBE that offered the low bid. This ... is [also] supported by the statistical data ... which shows that at least at the level of subcontracting, DBEs are generally utilized at a rate in line with their ability." Id. at *21, n. 31. Additionally, IDOT did not verify the anecdotal testimony of

DBE firm owners who testified to barriers in financing and bonding, however, the court found that such verification was unnecessary. Id. at *21, n. 32.

The court further found:

That such discrimination indirectly affects the ability of DBEs to compete for prime contracts, despite the fact that they are awarded solely on the basis of low bid, cannot be doubted: '[E]xperience and size are not race- and gender-neutral variables ... [DBE] construction firms are generally smaller and less experienced *because* of industry discrimination.'

Id. at *21, citing Concrete Works of Colorado, Inc. v. City and County of Denver, 321 F.3d 950 (10th Cir. 2003).

The parties stipulated to the fact that DBE utilization goals exceed DBE availability for 2003 and 2004. <u>Id.</u> at *22. IDOT alleged, and the court so found, that the high utilization on goals projects was due to the success of the DBE program, and not to an absence of discrimination. <u>Id.</u> The court found that the statistical disparities coupled with the anecdotal evidence indicated that IDOT's fiscal year 2005 goal was a "'plausible lower-bound estimate' of DBE participation in the absence of discrimination." <u>Id.</u> The court found that the plaintiff did not present persuasive evidence to contradict or explain IDOT's data. <u>Id.</u>

The plaintiff argued that even if accepted at face value, IDOT's marketplace data did not support the imposition of race- and gender-conscious remedies because there was no evidence of direct discrimination by prime contractors. <u>Id.</u> The court found first that IDOT's indirect evidence of discrimination in the bonding, financing, and insurance markets was sufficient to establish a compelling purpose. <u>Id.</u> Second, the court found:

[M]ore importantly, Plaintiff fails to acknowledge that, in enacting its DBE program, IDOT acted not to remedy its own prior discriminatory practices, but pursuant to federal law, which both authorized and required IDOT to remediate the effects of *private* discrimination on federally-funded highway contracts. This is a fundamental distinction ... [A] state or local government need not independently identify a compelling interest when its actions come in the course of enforcing a federal statute.

<u>Id.</u> at *23. The court distinguished <u>Builders Ass'n of Greater Chicago v. County of Cook</u>, 123 F. Supp. 2d 1087 (N.D. Ill. 2000), <u>aff'd</u> 256 F.3d 642 (7th Cir. 2001), noting that the program in that case was not federally-funded. <u>Id.</u> at *23, n. 34.

The court also found that "IDOT has done its best to maximize the portion of its DBE goal" through race- and gender-neutral measures, including anti-discrimination enforcement and small business initiatives. <u>Id.</u> at *24. The anti-discrimination efforts included: an internet website where a DBE can file an administrative complaint if it believes that a prime contractor is discriminating on the basis of race or gender in the award of sub-contracts; and requiring contractors seeking

prequalification to maintain and produce solicitation records on all projects, both public and private, with and without goals, as well as records of the bids received and accepted. <u>Id.</u> The small business initiative included: "unbundling" large contracts; allocating some contracts for bidding only by firms meeting the SBA's definition of small businesses; a "prompt payment provision" in its contracts, requiring that subcontractors be paid promptly after they complete their work, and prohibiting prime contractors from delaying such payments; and an extensive outreach program seeking to attract and assist DBE and other small firms DBE and other small firms enter and achieve success in the industry (including retaining a network of consultants to provide management, technical and financial assistance to small businesses, and sponsoring networking sessions throughout the state to acquaint small firms with larger contractors and to encourage the involvement of small firms in major construction projects). <u>Id.</u>

The court found "[s]ignificantly, Plaintiff did not question the efficacy or sincerity of these race- and gender-neutral measures." <u>Id.</u> at *25. Additionally, the court found the DBE program had significant flexibility in that utilized contract-by-contract goal setting (without a fixed DBE participation minimum) and contained waiver provisions. <u>Id.</u> The court found that IDOT approved 70 percent of waiver requests although waivers were requested on only 8 percent of all contracts. <u>Id.</u>, citing <u>Adarand Constructors</u>, <u>Inc. v. Slater "Adarand VII"</u>, 228 F.3d 1147, 1177 (10th Cir. 2000) (citing for the proposition that flexibility and waiver are critically important).

The court held that IDOT's DBE plan was narrowly tailored to the goal of remedying the effects of racial and gender discrimination in the construction industry, and was therefore constitutional.

3. Northern Contracting, Inc. v. State of Illinois, Illinois DOT, and USDOT, 2004 WL 422704 (N.D. III. March 3, 2004)

This is the earlier decision in Northern Contracting, Inc., 2005 WL 2230195 (N.D. Ill. Sept. 8, 2005), see above, which resulted in the remand of the case to consider the implementation of the Federal DBE Program by the Illinois DOT. This case involves the challenge to the Federal DBE Program. The plaintiff contractor sued the Illinois Department of Transportation and the USDOT challenging the facial constitutionality of the Federal DBE Program (TEA-21 and 49 C.F.R. Part 26) as well as the implementation of the Federal Program by the Illinois Department of Transportation (i.e., the IDOT DBE Program). The court held valid the Federal DBE Program, finding there is a compelling governmental interest and the federal program is narrowly tailored. The court also held there are issues of fact regarding whether Illinois DOT's ("IDOT") DBE Program is narrowly tailored to achieve the federal government's compelling interest. The court denied the Motions for Summary Judgment filed by the plaintiff and by IDOT, finding there were issues of material fact relating to IDOT's implementation of the Federal DBE Program.

The court in Northern Contracting, held that there is an identified compelling governmental interest for implementing the Federal DBE Program and that the Federal DBE Program is narrowly tailored to further that interest. Therefore, the court granted the Federal defendants' Motion for Summary Judgment challenging the validity of the Federal DBE Program. In this connection, the district court followed the decisions and analysis in Sherbrooke Turf, Inc. v. Minnesota Department of Transportation, 345 F. 3d 964 (8th Cir. 2003) and Adarand Constructors, Inc. v. Slater, 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). The court held, like these two Courts of Appeals that have addressed

this issue, that Congress had a strong basis in evidence to conclude that the DBE Program was necessary to redress private discrimination in federally-assisted highway subcontracting. The court agreed with the <u>Adarand VII</u> and <u>Sherbrooke Turf</u> courts that the evidence presented to Congress is sufficient to establish a compelling governmental interest, and that the contractors had not met their 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. 2004 WL422704 at *34, citing <u>Adarand VII</u>, 228 F. 3d at 1175.

In addition, the court analyzed the second prong of the strict scrutiny test, whether the government provided sufficient evidence that its program is narrowly tailored. In making this determination, the court looked at several factors, such as the efficacy of alternative remedies; the flexibility and duration of the race-conscious remedies, including the availability of waiver provisions; the relationships between the numerical goals and relevant labor market; the impact of the remedy on third parties; and whether the program is over-or-under-inclusive. The narrow tailoring analysis with regard to the as-applied challenge focused on Illinois' implementation of the Federal DBE Program.

First, the court held that the Federal DBE Program does not mandate the use of race-conscious measures by recipients of federal dollars, but in fact requires only that the goal reflect the recipient's determination of the level of DBE participation it would expect absent the effects of the discrimination. 49 C.F.R. § 26.45(b). The court recognized, as found in the Sherbrooke Turf and Adarand VII cases, that the Federal Regulations place strong emphasis on the use of race-neutral means to increase minority business participation in government contracting, that although narrow tailoring does not require exhaustion of every conceivable race-neutral alternative, it does require "serious, good faith consideration of workable race-neutral alternatives." 2004 WL422704 at *36, citing and quoting Sherbooke Turf, 345 F. 3d at 972, quoting Grutter v. Bollinger, 539 U.S. 306 (2003). The court held that the Federal regulations, which prohibit the use of quotas and severely limit the use of set-asides meet this requirement. The court agreed with the Adarand VII and Sherbrooke Turf courts that the Federal DBE Program does require recipients to make a serious good faith consideration of workable race-neutral alternatives before turning to race-conscious measures.

Second, the court found that because the Federal DBE Program is subject to periodic reauthorization, and requires recipients of Federal dollars to review their programs annually, the Federal DBE scheme is appropriately limited to last no longer than necessary.

Third, the court held that the Federal DBE Program is flexible for many reasons, including that the presumption that women and minority are socially disadvantaged is deemed rebutted if an individual's personal net worth exceeds \$750,000.00, and a firm owned by individual who is not presumptively disadvantaged may nevertheless qualify for such status if the firm can demonstrate that its owners are socially and economically disadvantaged. 49 C.F.R. § 26.67(b)(1)(d). The court found other aspects of the Federal Regulations provide ample flexibility, including recipients may obtain waivers or exemptions from any requirements. Recipients are not required to set a contract goal on every USDOT-assisted contract. If a recipient estimates that it can meet its entire overall goals for a given year through race-neutral means, it must implement the Program without setting contract goals during the year. If during the course of any year in which it is using contract goals a recipient determines that it will exceed its overall goals, it must adjust the use of race-conscious contract goals accordingly. 49 C.F.R. § 26.51(e)(f). Recipients also administering a DBE Program in good faith can

not be penalized for failing to meet their DBE goals, and a recipient may terminate its DBE Program if it meets its annual overall goal through race-neutral means for two consecutive years. 49 C.F.R. § 26.51(f). Further, a recipient may award a contract to a bidder/offeror that does not meet the DBE Participation goals so long as the bidder has made adequate good faith efforts to meet the goals. 49 C.F.R. § 26.53(a)(2). The regulations also prohibit the use of quotas. 49 C.F.R. § 26.43.

Fourth, the court agreed with the <u>Sherbooke Turf</u> court's assessment that the Federal DBE Program requires recipients to base DBE goals on the number of ready, willing and able disadvantaged business in the local market, and that this exercise requires recipients to establish realistic goals for DBE participation in the relevant labor markets.

Fifth, the court found that the DBE Program does not impose an unreasonable burden on third parties, including non-DBE subcontractors and taxpayers. The court found that the Federal DBE Program is a limited and properly tailored remedy to cure the effects of prior discrimination, a sharing of the burden by parties such as non-DBEs is not impermissible.

Finally, the court found that the Federal DBE Program was not over-inclusive because the regulations do not provide that every women and every member of a minority group is disadvantaged. Preferences are limited to small businesses with a specific average annual gross receipts over three fiscal years of \$16.6 million or less (at the time of this decision), and businesses whose owners' personal net worth exceed \$750,000.00 are excluded. 49 C.F.R. § 26.67(b)(1). A firm owned by a white male may qualify as social and economically disadvantaged. 49 C.F.R. § 26.67(d).

The court analyzed the constitutionality of the Illinois DBE Program. The court adopted the reasoning of the Eighth Circuit in Sherbrooke Turf, that a recipient's implementation of the Federal DBE Program must be analyzed under the narrow tailoring analysis but not the compelling interest inquiry. Therefore, the court agreed with Sherbrooke Turf that a recipient need not establish a distinct compelling interest before implementing the Federal DBE Program, but did conclude that a recipient's implementation of the Federal DBE Program must be narrowly tailored. The court found that issues of fact remain in terms of the validity of the Illinois DOT's DBE Program as implemented in terms of whether it was narrowly tailored to achieve the Federal Government's compelling interest. The court, therefore, denied the contractor plaintiff's Motion for Summary Judgment and the Illinois DOT's Motion for Summary Judgment.

4. <u>Western States Paving Co. v. Washington State DOT</u>, 407 F.3d 983 (9th Cir. 2005), cert. denied, 546 U.S. 1170 (2006)

This case out of the Ninth Circuit struck down a state's implementation of the Federal DBE Program for failure to pass constitutional muster. In <u>Western States</u>, the Ninth Circuit held that the State of Washington's implementation of the Federal DBE Program was unconstitutional because it did not satisfy the narrow tailoring element of the constitutional test. The Ninth Circuit held that the State must present its own evidence of past discrimination within its own boundaries in order to survive constitutional muster and could not merely rely upon data supplied by Congress. The United States Supreme Court denied certiorari. The analysis in the decision also is instructive in particular as to the application of the narrowly tailored prong of the strict scrutiny test.

Plaintiff Western States Paving Co. ("plaintiff") was a white male-owned asphalt and paving company. 407 F.3d 983, 987 (9th Cir. 2005). In July of 2000, plaintiff submitted a bid for a project

for the City of Vancouver; the project was financed with federal funds provided to the Washington State DOT ("WSDOT") under the Transportation Act for the 21st Century ("TEA-21"). <u>Id.</u>

Congress enacted TEA-21 in 1991 and after multiple renewals, it was set to expire on May 31, 2004. Id. at 988. TEA-21 established minimum minority-owned business participation requirements (10%) for certain federally-funded projects. Id. The regulations require each state accepting federal transportation funds to implement a DBE program that comports with the TEA-21. Id. TEA-21 indicates the 10 percent DBE utilization requirement is "aspirational," and the statutory goal "does not authorize or require recipients to set overall or contract goals at the 10 percent level, or any other particular level, or to take any special administrative steps if their goals are above or below 10 percent." Id.

TEA-21 sets forth a two-step process for a state to determine its own DBE utilization goal: (1) the state must calculate the relative availability of DBEs in its local transportation contracting industry (one way to do this is to divide the number of ready, willing and able DBEs in a state by the total number of ready, willing and able firms); and (2) the state is required to "adjust this base figure upward or downward to reflect the proven capacity of DBEs to perform work (as measured by the volume of work allocated to DBEs in recent years) and evidence of discrimination against DBEs obtained from statistical disparity studies." <u>Id.</u> at 989 (citing regulation). A state is also permitted to consider discrimination in the bonding and financing industries and the present effects of past discrimination. <u>Id.</u> (citing regulation). TEA-21 requires a generalized, "undifferentiated" minority goal and a state is prohibited from apportioning their DBE utilization goal among different minority groups (e.g., between Hispanics, blacks, and women). <u>Id.</u> at 990 (citing regulation).

"A state must meet the maximum feasible portion of this goal through race- [and gender-] neutral means, including informational and instructional programs targeted toward all small businesses." <u>Id.</u> (citing regulation). Race- and sex-conscious contract goals must be used to achieve any portion of the contract goals not achievable through race- and gender-neutral measures. <u>Id.</u> (citing regulation). However, TEA-21 does not require that DBE participation goals be used on every contract or at the same level on every contract in which they are used; rather, the overall effect must be to "obtain that portion of the requisite DBE participation that cannot be achieved through race- [and gender-] neutral means." <u>Id.</u> (citing regulation).

A prime contractor must use "good faith efforts" to satisfy a contract's DBE utilization goal. <u>Id.</u> (citing regulation). However, a state is prohibited from enacting rigid quotas that do not contemplate such good faith efforts. <u>Id.</u> (citing regulation).

Under the TEA-21 minority utilization requirements, the City set a goal of 14 percent minority participation on the first project plaintiff bid on; the prime contractor thus rejected plaintiff's bid in favor of a higher bidding minority-owned subcontracting firm. <u>Id.</u> at 987. In September of 2000, plaintiff again submitted a bid on project financed with TEA-21 funds and was again rejected in favor of a higher bidding minority-owned subcontracting firm. <u>Id.</u> The prime contractor expressly stated that he rejected plaintiff's bid due to the minority utilization requirement. <u>Id.</u>

Plaintiff filed suit against the WSDOT, Clark County, and the City, challenging the minority preference requirements of TEA-21 as unconstitutional both facially and as applied. <u>Id.</u> The district court rejected both of plaintiff's challenges. The district court held the program was facially

constitutional because it found that Congress had identified significant evidence of discrimination in the transportation contracting industry and the TEA-21 was narrowly tailored to remedy such discrimination. <u>Id.</u> at 988. The district court rejected the as-applied challenge concluding that Washington's implementation of the program comported with the federal requirements and the state was not required to demonstrate that its minority preference program independently satisfied strict scrutiny. <u>Id.</u> Plaintiff appealed to the Ninth Circuit Court of Appeals. <u>Id.</u>

The Ninth Circuit considered whether the TEA-21, which authorizes the use of race- and gender-based preferences in federally-funded transportation contracts, violated equal protection, either on its face or as applied by the State of Washington.

The court applied a strict scrutiny analysis to both the facial and as-applied challenges to TEA-21. <u>Id.</u> at 990-91. The court did not apply a separate intermediate scrutiny analysis to the gender-based classifications because it determined that it "would not yield a different result." <u>Id.</u> at 990, n. 6.

Facial challenge (Federal Government). The court first noted that the federal government has a compelling interest in "ensuring that its funding is not distributed in a manner that perpetuates the effects of either public or private discrimination within the transportation contracting industry." <u>Id.</u> at 991, citing <u>City of Richmond v. J.A. Croson Co.</u>, 488 U.S. 469, 492 (1989) and <u>Adarand Constructors</u>, <u>Inc. v. Slater ("Adarand VII")</u>, 228 F.3d 1147, 1176 (10th Cir. 2000). The court found that "[b]oth statistical and anecdotal evidence are relevant in identifying the existence of discrimination." <u>Id.</u> at 991. The court found that although Congress did not have evidence of discrimination against minorities in every state, such evidence was unnecessary for the enactment of nationwide legislation. <u>Id.</u> However, citing both the Eighth and Tenth Circuits, the court found that Congress had ample evidence of discrimination in the transportation contracting industry to justify TEA-21. <u>Id.</u> The court also found that because TEA-21 set forth flexible race-conscious measures to be used only when race-neutral efforts were unsuccessful, the program was narrowly tailored and thus satisfied strict scrutiny. <u>Id.</u> at 992-93. The court accordingly rejected plaintiff's facial challenge. <u>Id.</u>

As-applied challenge (State of Washington). Plaintiff alleged TEA-21 was unconstitutional as-applied because there was no evidence of discrimination in Washington's transportation contracting industry. <u>Id.</u> at 995. The State alleged that it was not required to independently demonstrate that its application of TEA-21 satisfied strict scrutiny. <u>Id.</u> The United States intervened to defend TEA-21's facial constitutionality, and "unambiguously conceded that TEA-21's race conscious measures can be constitutionally applied only in those states where the effects of discrimination are present." <u>Id.</u> at 996; <u>see also Br. for the United States</u> at 28 (April 19, 2004) ("DOT's regulations ... are designed to assist States in ensuring that race-conscious remedies are limited to *only* those jurisdictions where discrimination or its effects are a problem and *only* as a last resort when race-neutral relief is insufficient." (emphasis in original)).

The court found that the Eighth Circuit was the only other court to consider an as-applied challenge to TEA-21 in Sherbrooke Turf, Inc. v. Minnesota DOT, 345 F.3d 964 (8th Cir. 2003), cert. denied 124 S. Ct. 2158 (2004). Id. at 996. The Eighth Circuit did not require Minnesota and Nebraska to identify a compelling purpose for their programs independent of Congress's nationwide remedial objective. Id. However, the Eighth Circuit did consider whether the states' implementation of TEA-21 was narrowly tailored to achieve Congress's remedial objective. Id. The Eighth Circuit thus looked to the states' independent evidence of discrimination because "to be narrowly tailored, a *national*

program must be limited to those parts of the country where its race-based measures are demonstrably needed." <u>Id.</u> (internal citations omitted). The Eighth Circuit relied on the states' statistical analyses of the availability and capacity of DBEs in their local markets conducted by outside consulting firms to conclude that the states satisfied the narrow tailoring requirement. <u>Id.</u> at 997.

The court concurred with the Eighth Circuit and found that Washington did not need to demonstrate a compelling interest for its DBE program, independent from the compelling nationwide interest identified by Congress. <u>Id.</u> However, the court determined that the district court erred in holding that mere compliance with the federal program satisfied strict scrutiny. <u>Id.</u> Rather, the court held that whether Washington's DBE program was narrowly tailored was dependent on the presence or absence of discrimination in Washington's transportation contracting industry. <u>Id.</u> at 997-98. "If no such discrimination is present in Washington, then the State's DBE program does not serve a remedial purpose; it instead provides an unconstitutional windfall to minority contractors solely on the basis of their race or sex." <u>Id.</u> at 998. The court held that a Sixth Circuit decision to the contrary, <u>Tennessee Asphalt Co. v. Farris</u>, 942 F.2d 969, 970 (6th Cir. 1991), misinterpreted earlier case law. <u>Id.</u> at 997, n. 9.

The court found that moreover, even where discrimination is present in a state, a program is narrowly tailored only if it applies only to those minority groups who have actually suffered discrimination. <u>Id.</u> at 998, citing <u>Croson</u>, 488 U.S. at 478. The court also found that in <u>Monterey Mechanical Co. v. Wilson</u>, 125 F.3d 702, 713 (9th Cir. 1997), it had "previously expressed similar concerns about the haphazard inclusion of minority groups in affirmative action programs ostensibly designed to remedy the effects of discrimination." <u>Id.</u> In <u>Monterey Mechanical</u>, the court held that "the overly inclusive designation of benefited minority groups was a 'red flag signaling that the statute is not, as the Equal Protection Clause requires, narrowly tailored." <u>Id.</u>, citing <u>Monterey Mechanical</u>, 125 F.3d at 714. The court found that other courts are in accord. <u>Id.</u> at 998-99, citing <u>Builders Ass'n of Greater Chi. v. County of Cook</u>, 256 F.3d 642, 647 (7th Cir. 2001); <u>Associated Gen. Contractors of Ohio, Inc. v. Drabik</u>, 214 F.3d 730, 737 (6th Cir. 2000); <u>O'Donnell Constr. Co. v. District of Columbia</u>, 963 F.2d 420, 427 (D.C. Cir. 1992). Accordingly, the court found that each of the principal minority groups benefited by Washington's DBE program must have suffered discrimination within the State. <u>Id.</u> at 999.

The court found that Washington's program closely tracked the sample USDOT DBE program. Id. WSDOT calculated its DBE participation goal by first calculating the availability of ready, willing and able DBEs in the State (dividing the number of transportation contracting firms in the Washington State Office of Minority, Women and Disadvantaged Business Enterprises Directory by the total number of transportation contracting firms listed in the Census Bureau's Washington database, which equaled 11.17%). Id. WSDOT then upwardly adjusted the 11.17 percent base figure to 14 percent "to account for the proven capacity of DBEs to perform work, as reflected by the volume of work performed by DBEs [during a certain time period]." Id. Although DBEs performed 18 percent of work on State projects during the prescribed time period, Washington set the final adjusted figure at 14 percent because TEA-21 reduced the number of eligible DBEs in Washington by imposing more stringent certification requirements. Id. at 999, n. 11. WSDOT did not make an adjustment to account for discriminatory barriers in obtaining bonding and financing. Id. WSDOT similarly did not make any adjustment to reflect present or past discrimination "because it lacked any statistical studies evidencing such discrimination." Id.

WSDOT then determined that it needed to achieve 5 percent of its 14 percent goal through race-conscious means based on a 9 percent DBE participation rate on state-funded contracts that did not include affirmative action components (i.e., 9% participation could be achieved through race-neutral means). <u>Id.</u> at 1000. The USDOT approved WSDOT goal-setting program and the totality of its 2000 DBE program. <u>Id.</u>

Washington conceded that it did not have statistical studies to establish the existence of past or present discrimination. <u>Id.</u> It argued, however, that it had evidence of discrimination because minority-owned firms had the capacity to perform 14 percent of the State's transportation contracts in 2000 but received only 9 percent of the subcontracting funds on contracts that did not include an affirmative actions component. <u>Id.</u> The court found that the State's methodology was flawed because the 14 percent figure was based on the earlier 18 percent figure, discussed <u>supra</u>, which included contracts with affirmative action components. <u>Id.</u> The court concluded that the 14 percent figure did not accurately reflect the performance capacity of DBEs in a race-neutral market. <u>Id.</u> The court also found the State conceded as much to the district court. <u>Id.</u>

The court held that a disparity between DBE performance on contracts with an affirmative action component and those without "does not provide any evidence of discrimination against DBEs." <u>Id.</u> The court found that the only evidence upon which Washington could rely was the disparity between the proportion of DBE firms in the State (11.17%) and the percentage of contracts awarded to DBEs on race-neutral grounds (9%). <u>Id.</u> However, the court determined that such evidence was entitled to "little weight" because it did not take into account a multitude of other factors such as firm size. <u>Id.</u>

Moreover, the court found that the minimal statistical evidence was insufficient evidence, standing alone, of discrimination in the transportation contracting industry. Id. at 1001. The court found that WSDOT did not present any anecdotal evidence. Id. The court rejected the State's argument that the DBE applications themselves constituted evidence of past discrimination because the applications were not properly in the record, and because the applicants were not required to certify that they had been victims of discrimination in the contracting industry. Id. Accordingly, the court held that because the State failed to proffer evidence of discrimination within its own transportation contracting market, its DBE program was not narrowly tailored to Congress's compelling remedial interest. Id. at 1002-03.

The court affirmed the district court's grant on summary judgment to the United States regarding the facial constitutionality of TEA-21, reversed the grant of summary judgment to Washington on the as-applied challenge, and remanded to determine the State's liability for damages.

The dissent argued that where the State complied with TEA-21 in implementing its DBE program, it was not susceptible to an as-applied challenge.

Western States Paving Co. v. Washington DOT, US DOT & FHWA, 2006 WL 1734163 (W.D. Wash. June 23, 2006) (unpublished opinion)

This case was before the district court pursuant to the Ninth Circuit's remand order in Western States Paving Co. Washington DOT, US DOT, and FHWA, 407 F.3d 983 (9th Cir. 2005), cert. denied, 546 U.S. 1170 (2006). In this decision, the district court adjudicated cross Motions for Summary Judgment on plaintiff's claim for injunction and for damages under 42 U.S.C. §§1981, 1983, and §2000d.

Because the Washington Department of Transportation ("WSDOT") voluntarily discontinued its DBE program after the Ninth Circuit decision, <u>supra</u>, the district court dismissed plaintiff's claim for injunctive relief as moot. The court found "it is absolutely clear in this case that WSDOT will not resume or continue the activity the Ninth Circuit found unlawful in <u>Western States</u>," and cited specifically to the informational letters WSDOT sent to contractors informing them of the termination of the program.

Second, the court dismissed Western States' claims under 42 U.S.C. §§ 1981, 1983, and 2000d against Clark County and the City of Vancouver holding neither the City or the County acted with the requisite discriminatory intent. The court held the County and the City were merely implementing the WSDOT's unlawful DBE program and their actions in this respect were involuntary and required no independent activity. The court also noted that the County and the City were not parties to the precise discriminatory actions at issue in the case, which occurred due to the conduct of the "State defendants." Specifically, the WSDOT — and not the County or the City — developed the DBE program without sufficient anecdotal and statistical and evidence, and improperly relied on the affidavits of contractors seeking DBE certification "who averred that they had been subject to 'general societal discrimination."

Third, the court dismissed plaintiff's 42 U.S.C. §§ 1981 and 1983 claims against WSDOT, finding them barred by the Eleventh Amendment sovereign immunity doctrine. However, the court allowed plaintiff's 42 U.S.C. §2000d claim to proceed against WSDOT because it was not similarly barred. The court held that Congress had conditioned the receipt of federal highway funds on compliance with Title VI (42 U.S.C. § 2000d et seq.) and the waiver of sovereign immunity from claims arising under Title VI. Section 2001 specifically provides that "a State shall not be immune under the Eleventh Amendment of the Constitution of the United States from suit in Federal court for a violation of … Title VI." The court held that this language put the WSDOT on notice that it faced private causes of action in the event of noncompliance.

The court held that WSDOT's DBE program was not narrowly tailored to serve a compelling government interest. The court stressed that discriminatory intent is an essential element of a plaintiff's claim under Title VI. The WSDOT argued that even if sovereign immunity did not bar plaintiff's \$2000d claim, WSDOT could be held liable for damages because there was no evidence that WSDOT staff knew of or consciously considered plaintiff's race when calculating the annual utilization goal. The court held that since the policy was not "facially neutral" — and was in fact "specifically race conscious" — any resulting discrimination was therefore intentional, whether the reason for the classification was benign or its purpose remedial. As such, WSDOT's program was subject to strict scrutiny.

In order for the court to uphold the DBE program as constitutional, WSDOT had to show that the program served a compelling interest and was narrowly tailored to achieve that goal. The court found that the Ninth Circuit had already concluded that the program was not narrowly tailored and the record was devoid of any evidence suggesting that minorities currently suffer or have suffered discrimination in the Washington transportation contracting industry. The court therefore denied WSDOT's Motion for Summary Judgment on the \$2000d claim. The remedy available to Western States remains for further adjudication and the case is currently pending.

6. Sherbrooke Turf, Inc. v. Minnesota DOT, and Gross Seed Company v. Nebraska Department of Road, 345 F.3d 964 (8th Cir. 2003), cert. denied, 541 U.S. 1041 (2004)

This case is instructive in its analysis of state DOT DBE-type programs and their evidentiary basis and implementation. This case also is instructive in its analysis of the narrowly tailored requirement for state DBE programs. In upholding the challenged Federal DBE Program at issue in this case, the Eighth Circuit emphasized the race-, ethnicity- and gender-neutral elements, the ultimate flexibility of the Program, and the fact the Program was tied closely only to labor markets with identified discrimination.

In Sherbrooke Turf, Inc. v. Minnesota DOT, and Gross Seed Company v. Nebraska Department of Road, the U.S. Court of Appeals for the Eighth Circuit upheld the constitutionality of the Federal DBE Program (49 C.F.R. Part 26). The court held the Federal Program was narrowly tailored to remedy a compelling governmental interest. The court also held the federal regulations governing the states' implementation of the Federal DBE Program were narrowly tailored, and the state DOT's implementation of the Federal DBE Program was narrowly tailored to serve a compelling government interest.

Sherbrooke and Gross Seed both contended that the Federal DBE Program on its face and as applied in Minnesota and Nebraska violated the Equal Protection component of the Fifth Amendment's Due Process Clause. The Eighth Circuit engaged in a review of the Federal DBE Program and the implementation of the Program by the Minnesota DOT and the Nebraska Department of Roads under a strict scrutiny analysis and held that the Federal DBE Program was valid and constitutional and that the Minnesota DOT's and Nebraska DOR's implementation of the Program also was constitutional and valid. Applying the strict scrutiny analysis, the court first considered whether the Federal DBE Program established a compelling governmental interest, and found that it did. It concluded that Congress had a strong basis in evidence to support its conclusion that race-based measures were necessary for the reasons stated by the Tenth Circuit in Adarand, 228 F. 3d at 1167-76. Although the contractors presented evidence that challenged the data, they failed to present affirmative evidence that no remedial action was necessary because minority-owned small businesses enjoy non-discriminatory access to participation in highway contracts. Thus, the court held they failed to meet their ultimate burden to prove that the DBE Program is unconstitutional on this ground.

Finally, Sherbrooke and Gross Seed argued that the Minnesota DOT and Nebraska DOR must independently satisfy the compelling governmental interest test aspect of strict scrutiny review. The government argued, and the district courts' below agreed, that participating states need not independently meet the strict scrutiny standard because under the DBE Program the state must still comply with the DOT regulations. The Eighth Circuit held that this issue was not addressed by the Tenth Circuit in <u>Adarand</u>. The Eighth Circuit concluded that neither side's position is entirely sound.

The court rejected the contention of the contractors that their facial challenges to the DBE Program must be upheld unless the record before Congress included strong evidence of race discrimination in construction contracting in Minnesota and Nebraska. On the other hand, the court held a valid race-based program must be narrowly tailored, and to be narrowly tailored, a national program must be

limited to those parts of the country where its race-based measures are demonstrably needed to the extent that federal government delegates this tailoring function, as a state's implementation becomes relevant to a reviewing court's strict scrutiny. Thus, the court left the question of state implementation to the narrow tailoring analysis.

The court held that a reviewing court applying strict scrutiny must determine if the race-based measure is narrowly tailored, that is, whether the means chosen to accomplish the government's asserted purpose are specifically and narrowly framed to accomplish that purpose. The contractors have the ultimate burden of establishing that the DBE Program is not narrowly tailored. <u>Id.</u> The compelling interest analysis focused on the record before Congress; the narrow-tailoring analysis looks at the roles of the implementing highway construction agencies.

For determining whether a race-conscious remedy is narrowly tailored, the court looked at factors such as the efficacy of alternative remedies, the flexibility and duration of the race-conscious remedy, the relationship of the numerical goals to the relevant labor market, and the impact of the remedy on third parties. <u>Id.</u> Under the DBE Program, a state receiving federal highway funds must, on an annual basis, submit to DOT an overall goal for DBE participation in its federally-funded highway contracts. <u>See</u>, 49 C.F.R. § 26.45(f)(1). The overall goal "must be based on demonstrable evidence" as to the number of DBEs who are ready, willing, and able to participate as contractors or subcontractors on federally-assisted contracts. 49 C.F.R. § 26.45(b). The number may be adjusted upward to reflect the state's determination that more DBEs would be participating absent the effects of discrimination, including race-related barriers to entry. <u>See</u>, 49 C.F.R. § 26.45(d).

The state must meet the "maximum feasible portion" of its overall goal by race-neutral means and must submit for approval a projection of the portion it expects to meet through race-neutral means. See, 49 C.F.R. § 26.45(a), (c). If race-neutral means are projected to fall short of achieving the overall goal, the State must give preference to firms it has certified as DBEs. However, such preferences may not include quotas. 49 C.F.R. § 26.45(b). During the course of the year, if a state determines that it will exceed or fall short of its overall goal, it must adjust its use of race-conscious and race-neutral methods "[t]o ensure that your DBE program continues to be narrowly tailored to overcome the effects of discrimination." 49 C.F.R. § 26.51(f).

Absent bad faith administration of the program, a state's failure to achieve its overall goal will not be penalized. See, 49 C.F.R. § 26.47. If the state meets its overall goal for two consecutive years through race-neutral means, it is not required to set an annual goal until it does not meet its prior overall goal for a year. See, 49 C.F.R. § 26.51(f)(3). In addition, DOT may grant an exemption or waiver from any and all requirements of the Program. See, 49 C.F.R. § 26.15(b).

Like the district courts below, the Eighth Circuit concluded that the DOT regulations, on their face, satisfy the Supreme Court's narrowing tailoring requirements. First, the regulations place strong emphasis on the use of race-neutral means to increase minority business participation in government contracting. 345 F. 3d at 972. Narrow tailoring does not require exhaustion of every conceivable race-neutral alternative, but it does require serious good faith consideration of workable race-neutral alternatives. 345 F. 3d at 971, citing <u>Grutter v. Bollinger</u>, 539 U.S. 306.

Second, the revised DBE program has substantial flexibility. A State may obtain waivers or exemptions from any requirements and is not penalized for a good faith effort to meet its overall goal.

In addition, the program limits preferences to small businesses falling beneath an earnings threshold, and any individual whose net worth exceeds \$750,000.00 cannot qualify as economically disadvantaged. See, 49 C.F.R. § 26.67(b). Likewise, the DBE program contains built-in durational limits. 345 F.3d at 972. A State may terminate its DBE program if it meets or exceeds its annual overall goal through race-neutral means for two consecutive years. Id.; 49 C.F.R. § 26.51(f)(3).

Third, the court found, the USDOT has tied the goals for DBE participation to the relevant labor markets. The regulations require states to set overall goals based upon the likely number of minority contractors that would have received federal assisted highway contracts but for the effects of past discrimination. See, 49 C.F.R. § 26.45©-(d)(Steps 1 and 2). Though the underlying estimates may be inexact, the exercise requires the States to focus on establishing realistic goals for DBE participation in the relevant contacting markets. Id. at 972.

Finally, Congress and DOT have taken significant steps, the court held, to minimize the race-base nature of the DBE Program. Its benefits are directed at all small business owned and controlled by the socially and economically disadvantaged. While TEA-21 creates a rebuttable presumption that members of certain racial minorities fall within that class, the presumption is rebuttable, wealthy minority owners and wealthy minority-owned firms are excluded, and certification is available to persons who are not presumptably disadvantaged that demonstrate actual social and economic disadvantage. Thus, race is made relevant in the Program, but it is not a determinative factor. 345 F. 3d at 973. For these reasons, the court agreed with the district courts that the revised DBE Program is narrowly tailored on its face.

Sherbrooke and Gross Seed also argued that the DBE Program as applied in Minnesota and Nebraska is not narrowly tailored. Under the Federal Program, states set their own goals, based on local market conditions; their goals are not imposed by the federal government nor do recipients have to tie them to any uniform national percentage. 345 F. 3d at 973, citing 64 Fed. Reg. at 5102.

The court analyzed what Minnesota and Nebraska did in connection with their implementation of the Federal DBE Program. Minnesota DOT commissioned a disparity study of the highway contracting market in Minnesota. The study group determined that DBEs made up 11.4 percent of the prime contractors and subcontractors in a highway construction market. Of this number 0.6 percent were minority-owned and 10.8 percent women-owned. Based upon its analysis of business formation statistics, the consultant estimated that the number of participating minority-owned business would be 34 percent higher in a race-neutral market. Therefore, the consultant adjusted its DBE availability figure from 11.4 percent to 11.6 percent. Based on the study, Minnesota DOT adopted an overall goal of 11.6 percent DBE participation for federally-assisted highway projects. Minnesota DOT predicted that it would need to meet 9 percent of that overall goal through race and gender-conscious means, based on the fact DBE participation in State highway contracts dropped from 10.25 percent in 1998 to 2.25 percent in 1999 when its previous DBE Program was suspended by the injunction by the district court in an earlier decision in Sherbrooke. Minnesota DOT required each prime contract bidder to make a good faith effort to subcontract a prescribe portion of the project to DBEs, and determined that portion based on several individualized factors, including the availability of DBEs in the extent of subcontracting opportunities on the project.

The contractor presented evidence attacking the reliability of the data in the study, but it failed to establish that better data were available or that Minnesota DOT was otherwise unreasonable in

undertaking this thorough analysis and relying on its results. <u>Id.</u> The precipitous drop in DBE participation when no race-conscious methods were employed, the court concluded, supports Minnesota DOT's conclusion that a substantial portion of its overall goal could not be met with race-neutral measures. <u>Id.</u> On that record, the court agreed with the district court that the revised DBE Program serves a compelling government interest and is narrowly tailored on its face and as applied in Minnesota.

In Nebraska, the Nebraska DOR commissioned a disparity study also to review availability and capability of DBE firms in the Nebraska highway construction market. The availability study found that between 1995 and 1999, when Nebraska followed the mandatory 10 percent set-aside requirement, 9.95 percent of all available and capable firms were DBEs, and DBE firms received 12.7 percent of the contract dollars on federally assisted projects. After apportioning part of this DBE contracting to race-neutral contracting decisions, Nebraska DOR set an overall goal of 9.95 percent DBE participation and predicted that 4.82 percent of this overall goal would have to be achieved by race-and-gender conscious means. The Nebraska DOR required that prime contractors make a good faith effort to allocate a set portion of each contract's funds to DBE subcontractors. The Eighth Circuit concluded that Gross Seed, like Sherbrooke, failed to prove that the DBE Program is not narrowly tailored as applied in Nebraska. Therefore, the court affirmed the district courts' decisions in Gross Seed and Sherbrooke. (See district court opinions discussed infra.).

7. <u>Sherbrooke Turf, Inc. v. Minnesota DOT</u>, 2001 WL 1502841, No. 00-CV-1026 (D. Minn. 2001) (unpublished opinion), aff'd 345 F.3d 964 (8th Cir. 2003)

Sherbrooke involved a landscaping service contractor owned and operated by Caucasian males. The contractor sued the Minnesota Department of Transportation claiming the Federal DBE provisions of the Transportation Equity Act for the 21st Century ("TEA-21") are unconstitutional. Sherbrooke challenged the "federal affirmative action programs," the USDOT implementing regulations, and the Minnesota DOT's participation in the DBE Program. The United States Department of Transportation and the Federal Highway Administration intervened as Federal defendants in the case. Sherbrooke, 2001 WL 1502841 at *1.

The United States District Court in <u>Sherbrooke</u> relied substantially on the Tenth Circuit Court of Appeals decision in <u>Adarand Constructors</u>, <u>Inc. v. Slater</u>, 228 F.3d 1147 (10th Cir. 2000), in holding that the Federal DBE Program is constitutional. The district court addressed the issue of "random inclusion" of various groups as being within the program in connection with whether the Federal DBE Program is "narrowly tailored." The court held that Congress cannot enact a national program to remedy discrimination without recognizing classes of people whose history has shown them to be subject to discrimination and allowing states to include those people in its DBE Program.

The court held that the Federal DBE Program attempts to avoid the "potentially invidious effects of providing blanket benefits to minorities" in part,

by restricting a state's DBE preference to identified groups actually appearing in the target state. In practice, this means Minnesota can only certify members of one or another group as potential DBEs if they are present in the local market. This minimizes the chance that individuals — simply on the basis of their birth — will benefit from

Minnesota's DBE program. If a group is not present in the local market, or if they are found in such small numbers that they cannot be expected to be able to participate in the kinds of construction work TEA-21 covers, that group will not be included in the accounting used to set Minnesota's overall DBE contracting goal.

Sherbrooke, 2001 WL 1502841 at *10 (D. Minn.).

The court rejected plaintiff's claim that the Minnesota DOT must independently demonstrate how its program comports with <u>Croson's</u> strict scrutiny standard. The court held that the "Constitution calls out far different requirements when a state implements a federal affirmative action program, as opposed to those occasions when a state or locality initiates the program." <u>Id.</u> at *11 (emphasis added). The court in a footnote ruled that TEA-21, being a federal program, "relieves the state of any burden to independently carry the strict scrutiny burden." <u>Id.</u> at *11 n.3. The court held states that establish DBE programs under TEA-21 and 49 C.F.R. Part 26 are implementing a Congressionally-required program and not establishing a local one. As such, the court concluded that the state need not independently prove its DBE program meets the strict scrutiny standard. <u>Id.</u>

8. Gross Seed Co. v. Nebraska Department of Roads, Civil Action File No. 4:00CV3073 (D. Neb. May 6, 2002), aff'd 345 F. 3d 964 (8th Cir. 2003)

The United States District Court for the District of Nebraska held in <u>Gross Seed Co. v. Nebraska</u> (with the United States DOT and Federal Highway Administration as Interveners), that the Federal DBE Program (codified at 49 C.F.R. Part 26) is constitutional. The court also held that the Nebraska Department of Roads ("NDOR") DBE Program adopted and implemented solely to comply with the Federal DBE Program is "approved" by the court because the court found that 49 C.F.R. Part 26 and TEA-21 were constitutional.

The court concluded, similar to the court in Sherbrooke Turf, that the State of Nebraska did not need to independently establish that its program met the strict scrutiny requirement because the Federal DBE Program satisfied that requirement, and was therefore constitutional. The court did not engage in a thorough analysis or evaluation of the NDOR Program or its implementation of the Federal DBE Program. The court points out that the NDOR Program is adopted in compliance with the Federal DBE Program, and that the USDOT approved the use of NDOR's proposed DBE goals for fiscal year 2001, pending completion of USDOT's review of those goals. Significantly, however, the court in its findings does note that the NDOR established its overall goals for fiscal year 2001 based upon an independent availability/disparity study.

The court upheld the constitutionality of the Federal DBE Program by finding the evidence presented by the federal government and the history of the federal legislation are sufficient to demonstrate that past discrimination does exist "in the construction industry" and that racial and gender discrimination "within the construction industry" is sufficient to demonstrate a compelling interest in individual areas, such as highway construction. The court held that the Federal DBE Program was sufficiently "narrowly tailored" to satisfy strict scrutiny analysis based again on the evidence submitted by the federal government as to the Federal DBE Program.

9. <u>Geod Corporation v. New Jersey Transit Corporation</u>, et. seq. ____ F.Supp. 2d ____, 2009 WL 2595607 (D.N.J. August 20, 2009)

Plaintiffs Geod Corporation and its officers, who are white males, sued the New Jersey Transit Corporation ("NJT") and state officials seeking a declaration that NJT's DBE program was unconstitutional and in violation of the United States 5th and 14th Amendment to the United States Constitution and the Constitution of the State of New Jersey, and seeking a permanent injunction against NJT for enforcing or utilizing its DBE program. The NJT's DBE program was implemented in accordance with the Federal DBE Program and the Transportation Equity Act for the 21st century ("TEA-21") and 49 C.F.R. Part 26.

The parties filed cross Motions for Summary Judgment. The plaintiff Geod challenged the constitutionality of NJT's DBE program for multiple reasons, including alleging NJT could not justify establishing a program using race- and sex-based preferences; the NJT's disparity study did not provide a sufficient factual predicate to justify the DBE Program; NJT's statistical evidence did not establish discrimination; NJT did not have anecdotal data evidencing a "strong basis in evidence" of discrimination which justified a race- and sex-based program; NJT's program was not narrowly tailored and over-inclusive; NJT could not show an exceedingly persuasive justification for gender preferences; and that NJT's program was not narrowly tailored because race-neutral alternatives existed. In opposition, NJT filed a Motion for Summary Judgment asserting that its DBE program was narrowly tailored because it fully complied with the requirements of the Federal DBE Program and TEA-21.

Compelling interest. The district court held that states and their agencies are entitled to adopt the federal governments' compelling interest in enacting TEA-21 and its implementing regulations. 2009 WL 2595607 at *4. The court stated that plaintiff's argument that NJT cannot establish the need for its DBE program was a "red herring, which is unsupported." The plaintiff did not question the constitutionality of the compelling interest of the Federal DBE Program. The court held that all states "inherit the federal governments' compelling interest in establishing a DBE program." <u>Id</u>.

The court found that establishing a DBE program "is not contingent upon a state agency demonstrating a need for same, as the federal government has already done so." <u>Id</u>. The court concluded that this reasoning rendered plaintiff's assertions that NJT's disparity study did not have sufficient factual predicate for establishing its DBE program, and that no exceedingly persuasive justification was found to support gender based preferences, as without merit. <u>Id</u>. The court held that NJT does not need to justify establishing its DBE program, as it has already been justified by the legislature. <u>Id</u>.

NJT's DBE program as applied. The court noted that both plaintiff's and defendant's arguments were based on an alleged split in the Federal Circuit Courts of Appeal. Plaintiff Geod relies on Western States Paving Company v. Washington State DOT, 407 F.3d 983(9th Cir. 2005) for the proposition that an as-applied challenge to the constitutionality of a particular DBE program requires a demonstration by the recipient of federal funds that the program is narrowly tailored. Id at *5. In contrast, the NJT relied primarily on Northern Contracting. Inc. v. State of Illinois, 473 F.3d 715 (7th Cir. 2007) for the proposition that if a DBE program complies with TEA-21, it is narrowly tailored. Id.

The court viewed the various Federal Circuit Court of Appeals decisions as fact specific determinations which have lead to the parties distinguishing cases without any substantive difference in the application of law. <u>Id</u>.

The court reviewed the decisions by the Ninth Circuit in Western States Paving and the Seventh Circuit of Northern Contracting. In Western States Paving, the district court stated that the Ninth Circuit held for a DBE program to pass constitutional muster, it must be narrowly tailored; specifically, the recipient of federal funds must evidence past discrimination in the relevant market in order to utilize race conscious DBE goals. Id. at *5. The Ninth Circuit, according to district court, made a fact specific determination as to whether the DBE program complied with TEA-21 in order to decide if the program was narrowly tailored to meet the federal regulation's requirements. The district court stated that the requirement that a recipient must evidence past discrimination "is nothing more than a requirement of the regulation." Id.

The court stated that the Seventh Circuit in Northern Contracting held a recipient must demonstrate that its program is narrowly tailored, and that generally a recipient is insulated from this sort of constitutional attack absent a showing that the state exceeded its federal authority. <u>Id.</u>, citing Northern Contracting, 473 F.3d at 721. The district court held that implicit in Northern Contracting is the fact one may challenge the constitutionality of a DBE program, as it is applied, to the extent that the program exceeds its federal authority. <u>Id.</u>

The court, therefore, concluded that it must determine first whether NJT's DBE program complies with TEA-21, then whether NJT exceeded its federal authority in its application of its DBE program. In other words, the district court stated it must determine whether the NJT DBE program complies with TEA-21 in order to determine whether the program, as implemented by NJT, is narrowly tailored. <u>Id</u>.

The court pointed out that the Eighth Circuit Court of Appeals in Sherbrook Turf, Inc. v. Minnesota DOT, 345 F.3d 964 (8th Cir. 2003) found Minnesota's DBE program was narrowly tailored because it was in compliance with TEA-21's requirements. The Eighth Circuit in Sherbrook, according to the district court, analyzed the application of Minnesota's DBE program to ensure compliance with TEA-21's requirements to ensure that the DBE program implemented by Minnesota DOT was narrowly tailored. Id. at *5.

The court held that TEA-21 delegates to each state that accepts federal transportation funds the responsibility of implementing a DBE program that comports with TEA-21. In order to comport with TEA-21, the district court stated a recipient must (1) determine an appropriate DBE participation goal, (2) examine all evidence and evaluate whether an adjustment, if any, is needed to arrive at their goal, and (3) if the adjustment is based on continuing effects of past discrimination, provide demonstrable evidence that is logically and directly related to the effect for which the adjustment is sought. <u>Id</u>. at *6, citing <u>Western States Paving Company</u>, 407 F.3d at 983, 988.

Determination of DBE goal. First, the district court stated a recipient of federal funds must determine, at the local level, the figure that would constitute an appropriate DBE involvement goal, based on their relative availability of DBEs. <u>Id.</u> at *6, citing 49 C.F.R. § 26.45©. In this case, the court found that NJT did determine a base figure for the relative availability of DBEs, which accounted for demonstrable evidence of local market conditions and was designed to be rationally

related to the relative availability of DBEs. <u>Id</u>. The court pointed out that NJT conducted a disparity study; and the disparity study utilized NJT's DBE lists from fiscal years 1995-1999 and Census Data to determine its base DBE goal. The court noted that the plaintiffs' argument that the data used in the disparity study were stale, was without merit and had no basis in law. The court found that the disparity study took into account the primary industries, primary geographic market, and race neutral alternatives, then adjusted its goal to encompass these characteristics. <u>Id</u>. at *6.

The court stated that the use of DBE directories and Census data are what the legislature intended for state agencies to utilize in making a base DBE goal determination. <u>Id.</u> Also, the court stated that "perhaps more importantly, NJT's DBE goal was approved by the USDOT every year from 2002 until 2008." <u>Id.</u> at *6. Thus, the court found NJT appropriately determined their DBE availability, which was approved by the USDOT, pursuant to 49 C.F.R. § 26.45©. <u>Id.</u> at *6. The court held that NJT demonstrated its overall DBE goal is based on demonstrable evidence of the availability of ready, willing, and able DBEs relative to all businesses ready, willing, and able to participate in DOT assisted contracts and reflects its determination of the level of DBE participation it would expect absent the effects of discrimination. <u>Id</u>.

Also of significance, the court pointed out that plaintiffs did not provide any evidence that NJT did not set a DBE goal based upon 49 C.F. § 26.45©. The court thus held that genuine issues of material fact remain only as to whether a reasonable jury may find that the method used by NJT to determine its DBE goal was sufficiently narrowly tailored. <u>Id</u>. at *6.

NJT's adjustment of its DBE goal. The court pointed out that to determine what adjustment to make, the disparity study examined qualitative data such as focus groups on the pre-qualification status of DBEs, working with prime contractors, securing credit, and its effect on DBE participation, as well as procurement officer interviews to analyze, and compare and contrast their relationships with non-DBE vendors and DBE vendors. <u>Id.</u> at *7. This qualitative information was then compared to DBE bids and DBE goals for each year in question. NJT's adjustment to its DBE goal also included an analysis of the overall disparity ratio, as well as, DBE utilization based on race, gender and ethnicity. <u>Id.</u> A decomposition analysis was also performed. <u>Id.</u>

The court concluded that NJT provided evidence that it, at a minimum, examined the current capacity of DBEs to perform work in its DOT-assisted contracting program, as measured by the volume of work DBEs have performed in recent years, as well as utilizing the disparity study itself. The court pointed out there were two methods specifically approved by 49 C.F.R. § 26.45(d). <u>Id.</u>

The court also found that NJT took into account race neutral measures to ensure that the greatest percentage of DBE participation was achieved through race and gender neutral means. The district court concluded that "critically," plaintiffs failed to provide evidence of another, more perfect, method that could have been utilized to adjust NJT's DBE goal. <u>Id</u>. at *7. The court held that genuine issues of material fact remain only as to whether NJT's adjustment to its DBE goal is sufficiently narrowly tailored and thus constitutional. <u>Id</u>.

Effects of past discrimination. NJT, the court found, adjusted its DBE goal to account for the effects of past discrimination, noting the disparity study took into account the effects of past discrimination in the pre-qualification process of DBEs. <u>Id</u>. at *7. The court quoted the disparity

study as stating that it found non-trivial and statistically significant measures of discrimination in contract amounts awarded during the study period. <u>Id</u>. at *8.

The court found, however, that what was "gravely critical" about the finding of the past effects of discrimination is that it only took into account six groups including American Indian, Hispanic, Asian, blacks, women and "unknown," but did not include an analysis of past discrimination for the ethnic group "Iraqi," which is now a group considered to be a DBE by the NJT. <u>Id.</u> Because the disparity report included a category entitled "unknown," the court held a genuine issue of material fact remains as to whether "Iraqi" is legitimately within NJT's defined DBE groups and whether a demonstrable finding of discrimination exists for Iraqis. Therefore, the court denied both plaintiffs' and defendants' Motions for Summary Judgment as to the constitutionality of NJT's DBE program.

Qualified immunity and Title VI. The court also held that because the law was not clearly established at the time NJT established its DBE program to comply with TEA-21, the individual state defendants were entitled to qualified immunity and their Motion for Summary Judgment as to the state officials was granted. The court, in addition, held that plaintiff's Title VI claims were dismissed because the individual defendants were not recipients of federal funds, and that the NJT as an instrumentality of the State of New Jersey is entitled to sovereign immunity. Therefore, the court held that the plaintiff's claims based on the violation of 42 U.S.C. § 1983 were dismissed and NJT's Motion for Summary Judgment was granted as to that claim.

10. <u>Klaver Construction, Inc. v. Kansas DOT</u>, 211 F. Supp. 2d 1296 (D. Kan. 2002)

This is another case that involved a challenge to the USDOT Regulations that implement TEA-21 (49 C.F.R. Part 26), in which the plaintiff contractor sought to enjoin the Kansas Department of Transportation ("DOT") from enforcing its DBE Program on the grounds that it violates the Equal Protection Clause under the Fourteenth Amendment. This case involves a direct constitutional challenge to racial and gender preferences in federally-funded state highway contracts. This case concerned the constitutionality of the Kansas DOT's implementation of the Federal DBE Program, and the constitutionality of the gender-based policies of the federal government and the race- and gender-based policies of the Kansas DOT. The court granted the federal and state defendants (USDOT and Kansas DOT) Motions to Dismiss based on lack of standing. The court held the contractor could not show the specific aspects of the DBE Program that it contends are unconstitutional have caused its alleged injuries.

F. Recent Decisions Involving State or Local Government MBE/WBE Programs in Other Jurisdictions

Recent Decisions in Federal Circuit Courts of Appeal

1. <u>H. B. Rowe Co., Inc. v. W. Lyndo Tippett, NCDOT, et al</u>, F.3d 2010 WL 2871076 (4th Cir. July 22, 2010)

The State of North Carolina enacted statutory legislation that required prime contractors to engage in good faith efforts to satisfy participation goals for minority and women subcontractors on state-funded projects. (See facts as detailed in the decision of the United States District Court for the Eastern District of North Carolina discussed below.) The plaintiff, a prime contractor, brought this action after being denied a contract because of its failure to demonstrate good faith efforts to meet the participation goals set on a particular contract that it was seeking an award to perform work with NCDOT. Plaintiff asserted that the participation goals violated the Equal Protection Clause and sought injunctive relief and money damages.

After a bench trial, the district court held the challenged statutory scheme constitutional both on its face and as applied, and the plaintiff prime contractor appealed. 2010 WL 2871076 at *1. The Court of Appeals held that the State did not meet its burden of proof in all respects to uphold the validity of the state legislation. But, the Court agreed with the district court that the State produced a strong basis in evidence justifying the statutory scheme on its face, and as applied to African American and Native American subcontractors, and that the State demonstrated that the legislative scheme is narrowly tailored to serve its compelling interest in remedying discrimination against these racial groups. The Court thus affirmed the decision of the district court in part, reversed it in part and remanded for further proceedings consistent with the opinion. <u>Id</u>.

The Court found that the North Carolina statutory scheme "largely mirrored the federal Disadvantaged Business Enterprise ('DBE') program, with which every state must comply in awarding highway construction contracts that utilize federal funds.' 2010 WL 2871076 at *1. The Court also noted that federal courts of appeal "have uniformly upheld the federal DBE program against equal-protection challenges." <u>Id.</u>, at footnote 1, citing, <u>Adarand Constructors</u>, <u>Inc. v. Slater</u>, 228 F.3d 1147 (10th Cir. 2000).

In 2004, the State retained a consultant to prepare and issue a third study of subcontractors employed in North Carolina's highway construction industry. The study, according to the Court, marshaled evidence to conclude that disparities in the utilization of minority subcontractors persisted. 2010 WL 2871076 at *3. The Court pointed out that in response to the study, the North Carolina General Assembly substantially amended state legislation section 136-28.4 and the new law went into effect in 2006. The new statute modified the previous statutory scheme, according to the Court in five important respects. <u>Id</u>.

First, the amended statute expressly conditions implementation of any participation goals on the findings of the 2004 study. Second, the amended statute eliminates the 5 and 10 percent annual goals that were set in the predecessor statute. <u>Id</u>. at *3–*4. Instead, as amended, the statute requires the NCDOT to "establish annual aspirational goals, not mandatory goals, ... for the overall participation in contracts by disadvantaged minority-owned and women-owned businesses ... [that] shall not be applied rigidly on specific contracts or projects." <u>Id</u>. at *4, quoting, N.C. Gen.Stat. § 136-

28.4(b)(2010). The statute further mandates that the NCDOT set "contract-specific goals or project-specific goals ... for each disadvantaged minority-owned and women-owned business category that has demonstrated significant disparity in contract utilization" based on availability, as determined by the study. <u>Id</u>.

Third, the amended statute narrowed the definition of "minority" to encompass only those groups that have suffered discrimination. <u>Id.</u> at *4. The amended statute replaced a list of defined minorities to any certain groups by defining "minority" as "only those racial or ethnicity classifications identified by [the study] ... that have been subjected to discrimination in the relevant marketplace and that have been adversely affected in their ability to obtain contracts with the Department." <u>Id.</u> at *4 quoting section 136-28.4(c)(2)(2010).

Fourth, the amended statute required the Department to reevaluate the Program over time and respond to changing conditions. <u>Id</u>. Accordingly, the NCDOT must conduct a study similar to the 2004 study at least every five years. <u>Id</u>. § 136-28.4(b). Finally, the amended statute contained a sunset provision which was set to expire on August 31, 2009, but the General Assembly subsequently extended the sunset provision to August 31, 2010. <u>Id</u>. Section 136-28.4(e) (2010).

The Court also noted that the statute required only good faith efforts by the prime contractors to utilize subcontractors, and that the good faith requirement, the Court found, proved permissive in practice: prime contractors satisfied the requirement in 98.5 percent of cases, failing to do so in only 13 of 878 attempts. <u>Id</u>. at *5.

Strict scrutiny. The Court stated the strict scrutiny standard was applicable to justify a race-conscious measure, and that it is a substantial burden but not automatically "fatal in fact." <u>Id.</u> at *6. The Court pointed out that "[t]he unhappy persistence of both the practice and the lingering effects of racial discrimination against minority groups in this country is an unfortunate reality, and government is not disqualified from acting in response to it." <u>Id.</u> at *6 quoting <u>Alexander v. Estepp</u>, 95 F.3d 312, 315 (4th Cir. 1996). In so acting, a governmental entity must demonstrate it had a compelling interest in "remedying the effects of past or present racial discrimination." <u>Id.</u> at *6, quoting <u>Shaw v. Hunt</u>, 517 U.S. 899, 909 (1996).

Thus, the Court found that to justify a race-conscious measure, a state must identify that discrimination, public or private, with some specificity, and must have a strong basis in evidence for its conclusion that remedial action is necessary. <u>Id</u>. at *6 quoting <u>Croson</u>, 488 U.S. at 504 and <u>Wygant v. Jackson Board of Education</u>, 476 U.S. 267, 277 (1986)(plurality opinion).

The Court significantly noted that: "There is no 'precise mathematical formula to assess the quantum of evidence that rises to the *Croson* "strong basis in evidence" benchmark." <u>Id.</u> at *6, quoting <u>Rothe Dev. Corp. v. Department of Defense</u>, 545 F.3d 1023, 1049 (Fed.Cir. 2008). The Court stated that the sufficiency of the State's evidence of discrimination "must be evaluated on a case-by-case basis." <u>Id.</u> at *6. (internal quotation marks omitted).

The Court held that a state "need not conclusively prove the existence of past or present racial discrimination to establish a strong basis in evidence for concluding that remedial action is necessary." <u>Id</u>. at *6, citing <u>Concrete Works</u>, 321 F.3d at 958. Instead, a state may meet its burden by relying on "a significant statistical disparity" between the availability of qualified, willing, and able

minority subcontractors and the utilization of such subcontractors by the governmental entity or its prime contractors. <u>Id</u>. at *6, citing <u>Croson</u>, 488 U.S. at 509 (plurality opinion). The Court stated that "we further require that such evidence be 'corroborated by significant anecdotal evidence of racial discrimination.'" <u>Id</u>. at *6, quoting <u>Maryland Troopers Association</u>, <u>Inc. v. Evans</u>, 993 F.2d 1072, 1077 (4th Cir. 1993).

The Court pointed out that those challenging race-based remedial measures must "introduce credible, particularized evidence to rebut" the state's showing of a strong basis in evidence for the necessity for remedial action. <u>Id</u>. at *6, citing <u>Concrete Works</u>, 321 F.3d at 959. Challengers may offer a neutral explanation for the state's evidence, present contrasting statistical data, or demonstrate that the evidence is flawed, insignificant, or not actionable. <u>Id</u>. at *6 (citations omitted). However, the Court stated "that mere speculation that the state's evidence is insufficient or methodologically flawed does not suffice to rebut a state's showing." <u>Id</u>. at *6, citing <u>Concrete Works</u>, 321 F.3d at 991.

The Court held that to satisfy strict scrutiny, the state's statutory scheme must also be "narrowly tailored" to serve the state's compelling interest in not financing private discrimination with public funds. <u>Id.</u> at *7, citing <u>Alexander</u>, 95 F.3d at 315 (citing <u>Adarand</u>, 515 U.S. at 227).

Intermediate scrutiny. The Court held that courts apply "intermediate scrutiny" to statutes that classify on the basis of gender. <u>Id.</u> at *7. The Court found that a defender of a statute that classifies on the basis of gender meets this intermediate scrutiny burden "by showing at least that the classification serves important governmental objectives and that the discriminatory means employed are substantially related to the achievement of those objectives." <u>Id.</u> at *7, quoting <u>Mississippi</u> <u>University for Women v. Hogan</u>, 458 U.S. 718, 724 (1982). The Court noted that intermediate scrutiny requires less of a showing than does "the most exacting" strict scrutiny standard of review. <u>Id.</u> at *7.

The Court found that its "sister circuits" provide guidance in formulating a governing evidentiary standard for intermediate scrutiny. These courts agree that such a measure "can rest safely on something less than the 'strong basis in evidence' required to bear the weight of a race- or ethnicity-conscious program." <u>Id</u>. at *7, quoting <u>Engineering Contractors</u>, 122 F.3d at 909 (other citations omitted).

In defining what constitutes "something less" than a "strong basis in evidence," the courts also agree that the party defending the statute must "present ... sufficient probative evidence in support of its stated rationale for enacting a gender preference, i.e., ... the evidence [must be] sufficient to show that the preference rests on evidence-informed analysis rather than on stereotypical generalizations." Id. at *7 quoting Engineering Contractors, 122 F.3d at 910 and Concrete Works, 321 F.3d at 959. The gender-based measures must be based on "reasoned analysis rather than on the mechanical application of traditional, often inaccurate, assumptions." Id. at *7 quoting Hogan, 458 U.S. at 726.

Plaintiff's burden. The Court found that when a plaintiff alleges that a statute violates the Equal Protection Clause as applied and on its face, the plaintiff bears a heavy burden. In its facial challenge, the Court held that a plaintiff "has a very heavy burden to carry, and must show that [a statutory scheme] cannot operate constitutionally under any circumstance." <u>Id.</u> at *7, quoting <u>West Virginia v. U.S. Department of Health & Human Services</u>, 289 F.3d 281, 292 (4th Cir. 2002).

Statistical evidence. The Court examined the State's statistical evidence of discrimination in public-sector subcontracting, including its disparity evidence and regression analysis. The Court noted that the statistical analysis analyzed the difference or disparity between the amount of subcontracting dollars minority- and women-owned businesses actually won in a market and the amount of subcontracting dollars they would be expected to win given their presence in that market. Id. at *8. The Court found that the study grounded its analysis in the "disparity index," which measures the participation of a given racial, ethnic, or gender group engaged in subcontracting. Id. In calculating a disparity index, the study divided the percentage of total subcontracting dollars that a particular group won by the percent that group represents in the available labor pool, and multiplied the result by 100. Id. The closer the resulting index is to 100, the greater that group's participation. Id.

The Court held that after <u>Croson</u>, a number of our sister circuits have recognized the utility of the disparity index in determining statistical disparities in the utilization of minority- and women-owned businesses. <u>Id</u>. (Citations to multiple federal circuit court decisions omitted.) The Court also found that generally "courts consider a disparity index lower than 80 as an indication of discrimination." <u>Id</u>. Accordingly, the study considered only a disparity index lower than 80 as warranting further investigation. <u>Id</u>.

The Court pointed out that after calculating the disparity index for each relevant racial or gender group, the consultant tested for the statistical significance of the results by conducting standard deviation analysis through the use of t-tests. The Court noted that standard deviation analysis "describes the probability that the measured disparity is the result of mere chance." <u>Id.</u> at *9, quoting <u>Eng'g Contractors</u>, 122 F.3d at 914. The consultant considered the finding of two standard deviations to demonstrate "with 95 percent certainty that disparity, as represented by either overutilization or underutilization, is actually present." <u>Id.</u> *9, citing <u>Eng'g Contractors</u>, 122 F.3d at 914.

The study analyzed the participation of minority and women subcontractors in construction contracts awarded and managed from the central Department office in Raleigh, North Carolina. <u>Id.</u> *9. To determine utilization of minority and women subcontractors, the consultant developed a master list of contracts mainly from State-maintained electronic databases and hard copy files; then selected from that list a statistically valid sample of contracts, and calculated the percentage of subcontracting dollars awarded to minority- and women-owned businesses during the 5-year period ending in June 2003. (The study was published in 2004). <u>Id.</u> at *9.

The Court found that the use of data for centrally-awarded contracts was sufficient for its analysis. It was noted that data from construction contracts awarded and managed from the department divisions across the state and from preconstruction contracts, which involve work from engineering firms and architectural firms on the design of highways, was incomplete and not accurate. <u>Id</u> at *9, n.6. These data were not relied upon in forming the opinions relating to the study. <u>Id</u>. at *9, n. 6.

To estimate availability, which the Court defined as the percentage of a particular group in the relevant market area, the consultant created a vendor list comprising: (1) subcontractors approved by the department to perform subcontract work on state-funded projects, (2) subcontractors that performed such work during the study period, and (3) contractors qualified to perform prime construction work on state-funded contracts. <u>Id</u>. at *9. The Court noted that prime construction work on state-funded contracts was included based on the testimony by the consultant that prime contractors are qualified to perform subcontracting work and often do perform such work. <u>Id</u>. The Court also noted that the consultant submitted its master list to the Department for verification. <u>Id</u>.

Based on the utilization and availability figures, the study prepared the disparity analysis comparing the utilization based on the percentage of subcontracting dollars over the five year period, determining the availability in numbers of firms and their percentage of the labor pool, a disparity index which is the percentage of utilization in dollars divided by the percentage of availability multiplied by 100, and a T Value. <u>Id</u>.

The Court concluded that the figures demonstrated prime contractors underutilized all of the minority subcontractor classifications on state-funded construction contracts during the study period. Id. at *10. The disparity index for each group was less than 80 and, thus, the Court found warranted further investigation. Id. The t-test results, however, demonstrated marked underutilization only of African American and Native American subcontractors. Id. For African Americans the t-value fell outside of two standard deviations from the mean and, therefore, was statistically significant at a 95 percent confidence level. Id. The Court found there was at least a 95 percent probability that prime contractors' underutilization of African American subcontractors was *not* the result of mere chance. Id.

For Native American subcontractors, the t-value of 1.41 was significant at a confidence level of approximately 85 percent. <u>Id</u>. The t-values for Hispanic American and Asian American subcontractors, demonstrated significance at a confidence level of approximately 60 percent. The disparity index for women subcontractors found that they were overutilized during the study period. The overutilization was statistically significant at a 95 percent confidence level. <u>Id</u>.

The consultant also conducted a regression analysis studying the influence of certain company and business characteristics — with a particular focus on owner race and gender — on a firm's gross revenues. <u>Id</u>. The consultant obtained the data from a telephone survey of firms that conducted or attempted to conduct business with the Department. The survey pool consisted of a random sample of such firms. <u>Id</u>.

The consultant used the firms' gross revenues as the dependent variable in the regression analysis to test the effect of other variables, including company age and number of full-time employees, and the owners' years of experience, level of education, race, ethnicity, and gender. <u>Id</u>. at *10. The analysis revealed that minority and women ownership universally had a negative effect on revenue, and African American ownership of a firm had the largest negative effect on that firm's gross revenue of all the independent variables included in the regression model. <u>Id</u>. These findings led to the conclusion that for African Americans the disparity in firm revenue was not due to capacity-related or managerial characteristics alone. <u>Id</u>.

The Court rejected the arguments by the plaintiffs attacking the availability estimates. The Court rejected the plaintiff's expert, Dr. George LaNoue, who testified that bidder data — reflecting the number of subcontractors that actually bid on Department subcontracts — estimates availability better than "vendor data." <u>Id</u>. at *11. Dr. LaNoue conceded, however, that the State does not compile bidder data and that bidder data actually reflects skewed availability in the context of a goals program that urges prime contractors to solicit bids from minority and women subcontractors. <u>Id</u>. The Court found that the plaintiff's expert did not demonstrate that the vendor data used in the study was unreliable, or that the bidder data would have yielded less support for the conclusions reached. In sum, the Court held that the plaintiff's challenge to the availability estimate failed because it could not demonstrate that the 2004 study's availability estimate was inadequate. <u>Id</u>. at *11. The Court cited <u>Concrete Works</u>, 321 F.3d at 991 for the proposition that a challenger cannot meet its burden of proof through conjecture and unsupported criticisms of the state's evidence," and that the plaintiff Rowe presented no viable alternative for determining availability. <u>Id</u>. at *11, citing <u>Concrete Works</u>, 321 F.3d 991 and <u>Sherbrooke Turf</u>, Inc. v. Minn. Department of Transportation, 345 F.3d 964, 973 (8th Cir. 2003).

The Court also rejected the plaintiff's argument that minority subcontractors participated on state-funded projects at a level consistent with their availability in the relevant labor pool, based on the state's response that evidence as to the *number* of minority subcontractors working with state-funded projects does not effectively rebut the evidence of discrimination in terms of subcontracting *dollars*. <u>Id</u>. at *11. The State pointed to evidence indicating that prime contractors used minority businesses for low-value work in order to comply with the goals, and that African American ownership had a significant negative impact on firm revenue unrelated to firm capacity or experience. <u>Id</u>. The Court concluded plaintiff did not offer any contrary evidence. <u>Id</u>.

The Court found that the State bolstered its position by presenting evidence that minority subcontractors have the capacity to perform higher-value work. <u>Id</u>. at *12. The study concluded, based on a sample of subcontracts and reports of annual firm revenue, that exclusion of minority subcontractors from contracts under \$500,000 was not a function of capacity. <u>Id</u>. at *12. Further, the State showed that over 90 percent of the Department's subcontracts were valued at \$500,000 or less, and that capacity constraints do not operate with the same force on subcontracts as they may on prime contracts because subcontracts tend to be relatively small. <u>Id</u>. at *12. The Court pointed out that the Court in <u>Rothe II</u>, 545 F.3d at 1042-45, faulted disparity analyses of total construction dollars, including prime contracts, for failing to account for the relative capacity of firms in that case. <u>Id</u>. at *12.

The Court pointed out that in addition to the statistical evidence, the State also presented evidence demonstrating that from 1991 to 1993, during the Program's suspension, prime contractors awarded substantially less subcontracting dollars to minority and women subcontractors on state-funded projects. The Court rejected the plaintiff's argument that evidence of a decline in utilization does not raise an inference of discrimination. <u>Id.</u> at *12. The Court held that the very significant decline in utilization of minority and women-subcontractors — nearly 38 percent — "surely provides a basis for a fact finder to infer that discrimination played some role in prime contractors' reduced utilization of these groups during the suspension." <u>Id.</u> at *12, citing <u>Adarand v. Slater</u>, 228 F.3d at 1174 (finding that evidence of declining minority utilization after a program has been discontinued "strongly supports the government's claim that there are significant barriers to minority competition in the public subcontracting market, raising the specter of racial discrimination.") The Court found such an

inference is particularly compelling for minority-owned businesses because, even during the study period, prime contractors continue to underutilize them on state-funded road projects. <u>Id</u>. at *12.

Anecdotal evidence. The State additionally relied on three sources of anecdotal evidence contained in the study: a telephone survey, personal interviews, and focus groups. The Court found the anecdotal evidence showed an informal "good old boy" network of white contractors that discriminated against minority subcontractors. <u>Id.</u> at *12. The Court noted that three-quarters of African American respondents to the telephone survey agreed that an informal network of prime and subcontractors existed in the state, as did the majority of other minorities, and that more than half of African American respondents believed the network excluded their companies from bidding or awarding a contract, as did many of the other minorities. <u>Id.</u> at *12. The Court found that nearly half of non-minority male respondents corroborated the existence of an informal network; however, only 17 percent of them believed that the network excluded their companies from bidding or winning contracts. Id.

Anecdotal evidence also showed a large majority of African American respondents reported that double standards in qualifications and performance made it more difficult for them to win bids and contracts, that prime contractors view minority firms as being less competent than nonminority firms, and that nonminority firms change their bids when not required to hire minority firms. <u>Id</u>. at *13. In addition, the anecdotal evidence showed African American and Native American respondents believed that prime contractors sometimes dropped minority subcontractors after winning contracts. <u>Id</u>. at *13. The Court found that interview and focus-group responses echoed and underscored these reports. <u>Id</u>.

The anecdotal evidence indicated that prime contractors already know who they will use on the contract before they solicit bids; that the "good old boy network" affects business because prime contractors just pick up the phone and call their buddies, which excludes others from that market completely; that prime contractors prefer to use other less qualified minority-owned firms to avoid subcontracting with African American-owned firms; and that prime contractors use their preferred subcontractor regardless of the bid price. <u>Id</u>. at 13. Several minority subcontractors reported that prime contractors do not treat minority firms fairly, pointing to instances in which prime contractors solicited quotes the day before bids were due, did not respond to bids from minority subcontractors, refused to negotiate prices with them, or gave minority subcontractors insufficient information regarding the project. <u>Id</u>. at *13.

The Court rejected the plaintiffs' contention that the anecdotal data was flawed because the study did not verify the anecdotal data and that the consultant oversampled minority subcontractors in collecting the data. The Court stated that the plaintiffs offered no rationale as to why a fact finder could not rely on the State's "unverified" anecdotal data, and pointed out that a fact finder could very well conclude that anecdotal evidence need not — and indeed cannot — be verified because it "is nothing more than a witness's narrative of an incident told from the witness's perspective and including the witness's perceptions." <u>Id</u>. at *13, quoting <u>Concrete Works</u>, 321 F.3d at 989.

The Court held that anecdotal evidence simply supplements statistical evidence of discrimination. <u>Id.</u> at *13. The Court rejected plaintiffs' argument that the study oversampled representatives from minority groups, and found that surveying more non-minority men would not have advanced the inquiry. <u>Id.</u> at *13. It was noted that the samples of the minority groups were randomly selected. <u>Id.</u>

The Court found the state had compelling anecdotal evidence that minority subcontractors face race-based obstacles to successful bidding. <u>Id</u>. at *14.

Strong basis in evidence that the minority participation goals were necessary to remedy discrimination. The Court held that the State presented a "strong basis in evidence" for its conclusion that minority participation goals were necessary to remedy discrimination against African American and Native American subcontractors. <u>Id.</u> at *14. Therefore, the Court held that the State satisfied the strict scrutiny test. The Court found that the State's data demonstrated that prime contractors grossly underutilized African American and Native American subcontractors in public sector subcontracting during the study. <u>Id.</u> at *14. The Court noted that these findings have particular resonance because since 1983, North Carolina has encouraged minority participation in state-funded highway projects, and yet African American and Native American subcontractors continue to be underutilized on such projects. <u>Id.</u> at *14.

In addition, the Court found the disparity index in the study demonstrated statistically significant underutilization of African American subcontractors at a 95 percent confidence level, and of Native American subcontractors at a confidence level of approximately 85 percent. <u>Id</u>. at *15. The Court concluded the State bolstered the disparity evidence with regression analysis demonstrating that African American ownership correlated with a significant, negative impact on firm revenue, and demonstrated there was a dramatic decline in the utilization of minority subcontractors during the suspension of the program in the 1990s. <u>Id</u>.

Thus, the Court held the State's evidence showing a gross statistical disparity between the availability of qualified American and Native American subcontractors and the amount of subcontracting dollars they win on public sector contracts established the necessary statistical foundation for upholding the minority participation goals with respect to these groups. <u>Id</u>. at *15. The Court then found that the State's anecdotal evidence of discrimination against these two groups sufficiently supplemented the State's statistical showing. <u>Id</u>. The survey in the study exposed an informal, racially exclusive network that systemically disadvantaged minority subcontractors. <u>Id</u>. at *15. The Court held that the State could conclude with good reason that such networks exert a chronic and pernicious influence on the marketplace that calls for remedial action. <u>Id</u>. The Court found the anecdotal evidence indicated that racial discrimination is a critical factor underlying the gross statistical disparities presented in the study. <u>Id</u>. at *15. Thus, the Court held that the State presented substantial statistical evidence of gross disparity, corroborated by "disturbing" anecdotal evidence.

The Court held in circumstances like these, the Supreme Court has made it abundantly clear a state can remedy a public contracting system that withholds opportunities from minority groups because of their race. <u>Id</u>. at *16.

Narrowly tailored. The Court then addressed whether the North Carolina statutory scheme was narrowly tailored to achieve the State's compelling interest in remedying discrimination against African American and Native American subcontractors in public-sector subcontracting. The following factors were considered in determining whether the statutory scheme was narrowly tailored.

Neutral measures. The Court held that narrowly tailoring requires "serious, good faith consideration of workable race-neutral alternatives," but a state need not "exhaust ... every conceivable race-neutral alternative." <u>Id.</u> at *16 quoting <u>Grutter v. Bollinger</u>, 539 U.S. 306, 339 (2003). The Court found

that the study details numerous alternative race-neutral measures aimed at enhancing the development and competitiveness of small or otherwise disadvantaged businesses in North Carolina. Id. at *16. The Court pointed out various race-neutral alternatives and measures, including a Small Business Enterprise Program; waiving institutional barriers of bonding and licensing requirements on certain small business contracts of \$500,000 or less; and the Department contracts for support services to assist disadvantaged business enterprises with bookkeeping and accounting, taxes, marketing, bidding, negotiation, and other aspects of entrepreneurial development. Id. at *16.

The Court found that plaintiff identified no viable race-neutral alternatives that North Carolina had failed to consider and adopt. The Court also found that the State had undertaken most of the race-neutral alternatives identified by the U.S. Department of Transportation in its regulations governing the Federal DBE Program. <u>Id.</u> at *16, citing 49 C.F.R. § 26.51(b). The Court concluded that the State gave serious good faith consideration to race-neutral alternatives prior to adopting the statutory scheme. Id.

The Court concluded that despite these race-neutral efforts, the study demonstrated disparities continue to exist in the utilization of African American and Native American subcontractors in state-funded highway construction subcontracting, and that these "persistent disparities indicate the necessity of a race-conscious remedy." <u>Id.</u> at *17.

Duration. The Court agreed with the district court that the program was narrowly tailored in that it set a specific expiration date and required a new disparity study every five years. Id. at *17. The Court found that the program's inherent time limit and provisions requiring regular reevaluation ensure it is carefully designed to endure only until the discriminatory impact has been eliminated. Id. at *17, citing Adarand Constructors v. Slater, 228 F.3d at 1179 (quoting United States v. Paradise, 480 U.S. 149, 178 (1987)).

Program's goals related to percentage of minority subcontractors. The Court concluded that the State had demonstrated that the Program's participation goals are related to the percentage of minority subcontractors in the relevant markets in the State. <u>Id.</u> at *17. The Court found that the Department had taken concrete steps to ensure that these goals accurately reflect the availability of minority-owned businesses on a project-by-project basis. <u>Id.</u>

Flexibility. The Court held that the Program was flexible and thus satisfied this indicator of narrow tailoring. Id. at *17. The Program contemplated a waiver of project-specific goals when prime contractors make good faith efforts to meet those goals, and that the good faith efforts essentially require only that the prime contractor solicit and consider bids from minorities. Id. The State does not require or expect the prime contractor to accept any bid from an unqualified bidder, or any bid that is not the lowest bid. Id. The Court found there was a lenient standard and flexibility of the "good faith" requirement, and noted the evidence showed only 13 of 878 good faith submissions failed to demonstrate good faith efforts. Id.

Burden on non-MWBE/DBEs. The Court rejected the two arguments presented by plaintiff that the Program created onerous solicitation and follow-up requirements, finding that there was no need for additional employees dedicated to the task of running the solicitation program to obtain MBE/WBEs, and that there was no evidence to support the claim that plaintiff was required to subcontract millions of dollars of work that it could perform itself for less money. <u>Id</u>. at *18. The

State offered evidence from the study that prime contractors need not submit subcontract work that they can self-perform. <u>Id</u>.

Overinclusive. The Court found by its own terms the statutory scheme is not overinclusive because it limited relief to only those racial or ethnicity classifications that have been subjected to discrimination in the relevant marketplace and that had been adversely affected in their ability to obtain contracts with the Department. <u>Id</u>. at *18. The Court concluded that in tailoring the remedy this way, the legislature did not randomly include racial groups that may never have suffered from discrimination in the construction industry, but rather, contemplated participation goals only for those groups shown to have suffered discrimination. <u>Id</u>.

In sum, the Court held that the statutory scheme is narrowly tailored to achieve the State's compelling interest in remedying discrimination in public-sector subcontracting against African American and Native American subcontractors. <u>Id</u>. at *18.

Women-owned businesses overutilized. The study's public-sector disparity analysis demonstrated that women-owned businesses won far more than their expected share of subcontracting dollars during the study period. <u>Id.</u> at *18. In other words, the Court concluded that prime contractors substantially overutilized women subcontractors on public road construction projects. <u>Id.</u> The Court found the public-sector evidence did not evince the "exceedingly persuasive justification" the Supreme Court requires. <u>Id.</u> at *18.

The Court noted that the State relied heavily on private-sector data from the study attempting to demonstrate that prime contractors significantly underutilized women subcontractors in the general construction industry statewide and in the Charlotte, North Carolina area. <u>Id.</u> at *19. However, because the study did not provide a t-test analysis on the private sector disparity figures to calculate statistical significance, the Court could not determine whether this private underutilization was "the result of mere chance." <u>Id.</u> at *19. The Court found troubling the "evidentiary gap" that there was no evidence indicating the extent to which women-owned businesses competing on public sector road projects vied for private sector subcontracts in the general construction industry. <u>Id.</u> at *19. The Court also found that the State did not present any anecdotal evidence indicating that women subcontractors successfully bidding on State contracts faced private-sector discrimination. <u>Id.</u> In addition, the Court found missing any evidence prime contractors that discriminate against women subcontractors in the private sector nevertheless win public-sector contracts. <u>Id.</u>

The Court pointed out that it did not suggest that the proponent of a gender-conscious program "must always tie private discrimination to public action." <u>Id</u>. at *19, FN. 11. But the Court held that where, as here, there existed substantial probative evidence of overutilization in the relevant public sector, a state must present something more than generalized private sector data unsupported by compelling anecdotal evidence to justify a gender-conscious program. <u>Id</u>. at *19, n. 11.

Moreover, the Court found the State failed to establish the amount of overlap between general construction and road construction subcontracting. <u>Id</u>. at *19. The Court said that the dearth of evidence as to the correlation between public road construction subcontracting and private general construction subcontracting severely limits the private data's probative value in this case. <u>Id</u>.

Thus, the Court held that the State could not overcome the strong evidence of overutilization in the public sector in terms of gender participation goals, and that the proffered private sector data failed to establish discrimination in the particular field in question. <u>Id</u>. at *20. Further, the anecdotal evidence, the Court concluded, indicated that most women subcontractors do not experience discrimination. <u>Id</u>. Thus, the Court held that the State failed to present sufficient evidence to support the Program's current inclusion of women subcontractors in setting participation goals. <u>Id</u>.

Holding. The Court held that the state legislature had crafted legislation that withstood the constitutional scrutiny. <u>Id.</u> at *21. The Court concluded that in light of the statutory scheme's flexibility and responsiveness to the realities of the marketplace, and given the State's strong evidence of discrimination again African American and Native American subcontractors in public-sector subcontracting, the State's application of the statute to these groups is constitutional. <u>Id.</u> at *21. However, the Court also held that because the State failed to justify its application of the statutory scheme to women, Asian American, and Hispanic American subcontractors, the Court found those applications were not constitutional.

Therefore, the Court affirmed the judgment of the district court with regard to the facial validity of the statute, and with regard to its application to African American and Native American subcontractors. <u>Id.</u> at *21. The Court reversed the district court's judgment insofar as it upheld the constitutionality of the state legislature as applied to women, Asian American and Hispanic American subcontractors. <u>Id.</u> The Court thus remanded the case to the district court to fashion an appropriate remedy consistent with the opinion. <u>Id.</u>

Concurring opinions. It should be pointed out that there were two concurring opinions by the three Judge panel: one judge concurred in the judgment, and the other judge concurred fully in the majority opinion and the judgment.

2. <u>Jana-Rock Construction, Inc. v. New York State Dept. of Economic</u> Development, 438 F.3d 195 (2d Cir. 2006)

This recent case is instructive in connection with the determination of the groups that may be included in a MBE/WBE-type program, and the standard of analysis utilized to evaluate a local government's non-inclusion of certain groups. In this case, the Second Circuit Court of Appeals held racial classifications that are challenged as "under-inclusive" (i.e., those that exclude persons from a particular racial classification) are subject to a "rational basis" review, not strict scrutiny.

Plaintiff Luiere, a 70 percent shareholder of Jana-Rock Construction, Inc. ("Jana Rock") and the "son of a Spanish mother whose parents were born in Spain," challenged the constitutionality of the State of New York's definition of "Hispanic" under its local minority-owned business program. 438 F.3d 195, 199-200 (2d Cir. 2006). Under the U.S. Department of Transportation regulations, 49 C.F.R. § 26.5, "Hispanic Americans" are defined as "persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race." Id. at 201. Upon proper application, Jana-Rock was certified by the New York Department of Transportation as a Disadvantaged Business Enterprise ("DBE") under the federal regulations. Id.

However, unlike the federal regulations, the State of New York's local minority-owned business program included in its definition of minorities "Hispanic persons of Mexican, Puerto Rican, Dominican, Cuban, Central or South American of either Indian or Hispanic origin, regardless of

race." The definition did not include all persons from, or descendants of persons from, Spain or Portugal. <u>Id.</u> Accordingly, Jana-Rock was denied MBE certification under the local program; Jana-Rock filed suit alleging a violation of the Equal Protection Clause. <u>Id.</u> at 202-03. The plaintiff conceded that the overall minority-owned business program satisfied the requisite strict scrutiny, but argued that the definition of "Hispanic" was fatally under-inclusive. <u>Id.</u> at 205.

The Second Circuit found that the narrow-tailoring prong of the strict scrutiny analysis "allows New York to identify which groups it is prepared to prove are in need of affirmative action without demonstrating that no other groups merit consideration for the program." <u>Id.</u> at 206. The court found that evaluating under-inclusiveness as an element of the strict scrutiny analysis was at odds with the United States Supreme Court decision in <u>City of Richmond v. J.A. Croson Co.</u>, 488 U.S. 469 (1989) which required that affirmative action programs be no broader than necessary. <u>Id.</u> at 207-08. The court similarly rejected the argument that the state should mirror the federal definition of "Hispanic," finding that Congress has more leeway than the states to make broader classifications because Congress is making such classifications on the national level. <u>Id.</u> at 209.

The court opined — without deciding — that it may be impermissible for New York to simply adopt the "federal USDOT definition of Hispanic without at least making an independent assessment of discrimination against Hispanics of Spanish Origin in New York." <u>Id.</u> Additionally, finding that the plaintiff failed to point to any discriminatory purpose by New York in failing to include persons of Spanish or Portuguese descent, the court determined that the rational basis analysis was appropriate. Id. at 213.

The court held that the plaintiff failed the rational basis test for three reasons: (1) because it was not irrational nor did it display animus to exclude persons of Spanish and Portuguese descent from the definition of Hispanic; (2) because the fact the plaintiff could demonstrate evidence of discrimination that he personally had suffered did not render New York's decision to exclude persons of Spanish and Portuguese descent irrational; and (3) because the fact New York may have relied on Census data including a small percentage of Hispanics of Spanish descent did not mean that it was irrational to conclude that Hispanics of Latin American origin were in greater need of remedial legislation. <u>Id.</u> at 213-14. Thus, the Second Circuit affirmed the conclusion that New York had a rational basis for its definition to not include persons of Spanish and Portuguese descent, and thus affirmed the district court decision upholding the constitutionality of the challenged definition.

3. Rapid Test Prods., Inc. v. Durham Sch. Servs., Inc., 460 F.3d 859 (7th Cir. 2006)

In <u>Rapid Test Products</u>, Inc. v. <u>Durham School Services Inc.</u>, the Seventh Circuit Court of Appeals held that 42 U.S.C. § 1981 (the federal anti-discrimination law) did not provide an "entitlement" in disadvantaged businesses to receive contracts subject to set aside programs; rather, § 1981 provided a remedy for individuals who were subject to discrimination.

Durham School Services, Inc. ("Durham"), a prime contractor, submitted a bid for and won a contract with an Illinois school district. The contract was subject to a set-aside program reserving some of the subcontracts for disadvantaged business enterprises (a race- and gender-conscious program). Prior to bidding, Durham negotiated with Rapid Test Products, Inc. ("Rapid Test"), made one payment to Rapid Test as an advance, and included Rapid Test in its final bid. Rapid Test

believed it had received the subcontract. However, after the school district awarded the contract to Durham, Durham gave the subcontract to one of Rapid Test's competitor's, a business owned by an Asian male. The school district agreed to the substitution. Rapid Test brought suit against Durham under 42 U.S.C. § 1981 alleging that Durham discriminated against it because Rapid's owner was a black woman.

The district court granted summary judgment in favor of Durham holding the parties' dealing had been too indefinite to create a contract. On appeal, the Seventh Circuit Court of Appeals stated that "\$ 1981 establishes a rule against discrimination in contracting and does not create any entitlement to be the beneficiary of a contract reserved for firms owned by specified racial, sexual, ethnic, or religious groups. Arguments that a particular set-aside program is a lawful remedy for prior discrimination may or may not prevail if a potential subcontractor claims to have been excluded, but it is to victims of discrimination rather than frustrated beneficiaries that \$ 1981 assigns the right to litigate."

The court held that if race or sex discrimination is the reason why Durham did not award the subcontract to Rapid Test, then § 1981 provides relief. Having failed to address this issue, the Seventh Circuit Court of Appeals remanded the case to the district court to determine whether Rapid Test had evidence to back up its claim that race and sex discrimination, rather than a nondiscriminatory reason such as inability to perform the services Durham wanted, accounted for Durham's decision to hire Rapid Test's competitor.

Virdi v. DeKalb County School District, 135 Fed. Appx. 262, 2005 WL 138942 (11th Cir. 2005) (unpublished opinion)

Although it is an unpublished opinion, <u>Virdi v. DeKalb County School District</u> is a recent Eleventh Circuit decision reviewing a challenge to a local government MBE/WBE-type program, which is instructive to the disparity study. In <u>Virdi</u>, the Eleventh Circuit struck down a MBE/WBE goal program that the court held contained racial classifications. The court based its ruling primarily on the failure of the DeKalb County School District (the "District") to seriously consider and implement a race-neutral program and to the infinite duration of the program.

Plaintiff Virdi, an Asian American architect of Indian descent, filed suit against the District, members of the DeKalb County Board of Education (both individually and in their official capacities) (the "Board") and the Superintendent (both individually and in his official capacity) (collectively "defendants") pursuant to 42 U.S.C. §§ 1981 and 1983 and the Fourteenth Amendment alleging that they discriminated against him on the basis of race when awarding architectural contracts. 135 Fed. Appx. 262, 264 (11th Cir. 2005). Virdi also alleged the school district's Minority Vendor Involvement Program was facially unconstitutional. <u>Id.</u>

The district court initially granted the defendants' Motions for Summary Judgment on all of Virdi's claims and the Eleventh Circuit Court of Appeals reversed in part, vacated in part, and remanded. <u>Id.</u> On remand, the district court granted the defendants' Motion for Partial Summary Judgment on the facial challenge, and then granted the defendants' motion for a judgment as a matter of law on the remaining claims at the close of Virdi's case. <u>Id.</u>

In 1989, the Board appointed the Tillman Committee (the "Committee") to study participation of female- and minority-owned businesses with the District. Id. The Committee met with various

District departments and a number of minority contractors who claimed they had unsuccessfully attempted to solicit business with the District. Id. Based upon a "general feeling" that minorities were under-represented, the Committee issued the Tillman Report (the "Report") stating "the Committee's impression that '[m]inorities ha[d] not participated in school board purchases and contracting in a ratio reflecting the minority make-up of the community." Id. The Report contained no specific evidence of past discrimination nor any factual findings of discrimination. <u>Id.</u>

The Report recommended that the District: (1) Advertise bids and purchasing opportunities in newspapers targeting minorities, (2) conduct periodic seminars to educate minorities on doing business with the District, (3) notify organizations representing minority firms regarding bidding and purchasing opportunities, and (4) publish a "how to" booklet to be made available to any business interested in doing business with the District.

<u>Id.</u> The Report also recommended that the District adopt annual, aspirational participation goals for women- and minority-owned businesses. <u>Id.</u> The Report contained statements indicating the selection process should remain neutral and recommended that the Board adopt a non-discrimination statement. <u>Id.</u>

In 1991, the Board adopted the Report and implemented several of the recommendations, including advertising in the AJC, conducting seminars, and publishing the "how to" booklet. <u>Id.</u> The Board also implemented the Minority Vendor Involvement Program (the "MVP") which adopted the participation goals set forth in the Report. <u>Id.</u> at 265.

The Board delegated the responsibility of selecting architects to the Superintendent. <u>Id.</u> Virdi sent a letter to the District in October 1991 expressing interest in obtaining architectural contracts. <u>Id.</u> Virdi sent the letter to the District Manager and sent follow-up literature; he re-contacted the District Manager in 1992 and 1993. <u>Id.</u> In August 1994, Virdi sent a letter and a qualifications package to a project manager employed by Heery International. <u>Id.</u> In a follow-up conversation, the project manager allegedly told Virdi that his firm was not selected not based upon his qualifications, but because the "District was only looking for 'black-owned firms.'" <u>Id.</u> Virdi sent a letter to the project manager requesting confirmation of his statement in writing and the project manager forwarded the letter to the District. <u>Id.</u>

After a series of meetings with District officials, in 1997, Virdi met with the newly hired Executive Director. <u>Id.</u> at 266. Upon request of the Executive Director, Virdi re-submitted his qualifications but was informed that he would be considered only for future projects (Phase III SPLOST projects). <u>Id.</u> Virdi then filed suit before any Phase III SPLOST projects were awarded. <u>Id.</u>

The Eleventh Circuit considered whether the MVP was facially unconstitutional and whether the defendants intentionally discriminated against Virdi on the basis of his race. The court held that strict scrutiny applies to all racial classifications and is not limited to merely set-asides or mandatory quotas; therefore, the MVP was subject to strict scrutiny because it contained racial classifications. <u>Id.</u> at 267. The court first questioned whether the identified government interest was compelling. <u>Id.</u> at 268. However, the court declined to reach that issue because it found the race-based participation goals were not narrowly tailored to achieving the identified government interest. <u>Id.</u>

The court held the MVP was not narrowly tailored for two reasons. <u>Id.</u> First, because no evidence existed that the District considered race-neutral alternatives to "avoid unwitting discrimination." The court found that "[w]hile narrow tailoring does not require exhaustion of every conceivable race-neutral alternative, it does require serious, good faith consideration of whether such alternatives could serve the governmental interest at stake." <u>Id.</u>, citing <u>Grutter v. Bollinger</u>, 539 U.S. 306, 339 (2003), and <u>Richmond v. J.A. Croson Co.</u>, 488 U.S. 469, 509-10 (1989). The court found that District could have engaged in any number of equally effective race-neutral alternatives, including using its outreach procedure and tracking the participation and success of minority-owned business as compared to non-minority-owned businesses. <u>Id.</u> at 268, n.8. Accordingly, the court held the MVP was not narrowly tailored. <u>Id.</u> at 268.

Second, the court held that the unlimited duration of the MVP's racial goals negated a finding of narrow tailoring. <u>Id.</u> "[R]ace conscious ... policies must be limited in time." <u>Id.</u>, citing <u>Grutter</u>, 539 U.S. at 342, and <u>Walker v. City of Mequite</u>, <u>TX</u>, 169 F.3d 973, 982 (5th Cir. 1999). The court held that because the government interest could have been achieved utilizing race-neutral measures, and because the racial goals were not temporally limited, the MVP could not withstand strict scrutiny and was unconstitutional on its face. <u>Id.</u> at 268.

With respect to Virdi's claims of intentional discrimination, the court held that although the MVP was facially unconstitutional, no evidence existed that the MVP or its unconstitutionality caused Virdi to lose a contract that he would have otherwise received. <u>Id.</u> Thus, because Virdi failed to establish a causal connection between the unconstitutional aspect of the MVP and his own injuries, the court affirmed the district court's grant of judgment on that issue. <u>Id.</u> at 269. Similarly, the court found that Virdi presented insufficient evidence to sustain his claims against the Superintendent for intentional discrimination. <u>Id.</u>

The court reversed the district court's order pertaining to the facial constitutionality of the MVP's racial goals, and affirmed the district court's order granting defendants' motion on the issue of intentional discrimination against Virdi. <u>Id.</u> at 270.

5. <u>In re City of Memphis</u>, 293 F. 3d 345 (6th Cir. 2002)

This case is instructive to the disparity study in particular based on its holding that a local government may be prohibited from utilizing post-enactment evidence in support of a MBE/WBE-type program. The United States Court of Appeals for Sixth Circuit held that pre-enactment evidence was required to justify the City of Memphis' MBE/WBE Program. The Sixth Circuit held that a government must have had sufficient evidentiary justification for a racially conscious statue in advance of its passage. The district court had ruled that the City could not introduce the post-enactment study as evidence of a compelling interest to justify its MBE/WBE Program. The Sixth Circuit denied the City's application for an interlocutory appeal on the district court's order and refused to grant the City's request to appeal this issue.

6. <u>Builders Ass'n of Greater Chicago v. County of Cook, Chicago</u>, 256 F.3d 642 (7th Cir. 2001)

This case is instructive to the disparity study because of its analysis of the Cook County MBE/WBE program and the evidence used to support that program. The decision emphasizes the need for any race-conscious program to be based upon credible evidence of discrimination by the local

government against MBE/WBEs and to be narrowly tailored to remedy only that identified discrimination.

In <u>Builders Ass'n of Greater Chicago v. County of Cook, Chicago</u>, 256 F.3d 642 (7th Cir. 2001) the United States Court of Appeals for the Seventh Circuit held the Cook County, Chicago MBE/WBE Program was unconstitutional. The court concluded there was insufficient evidence of a compelling interest. The court held there was no credible evidence that Cook County in the award of construction contacts discriminated against any of the groups "favored" by the Program. The court also found that the Program was not "narrowly tailored" to remedy the wrong sought to be redressed, in part because it was over-inclusive in the definition of minorities. The court noted the list of minorities included groups that have not been subject to discrimination by Cook County.

The court considered as an unresolved issue whether a different, and specifically a more permissive, standard than strict scrutiny is applicable to preferential treatment on the basis of sex, rather than race or ethnicity. 256 F.3d at 644. The court noted that the United States Supreme Court in United States v. Virginia ("VMI"), 518 U.S. 515, 532 and n.6 (1996), held racial discrimination to a stricter standard than sex discrimination, although the court in Cook County stated the difference between the applicable standards has become "vanishingly small." Id. The court pointed out that the Supreme Court said in the <u>VMI</u> case, that "parties who seek to defend gender-based government action must demonstrate an 'exceedingly persuasive' justification for that action ..." and, realistically, the law can ask no more of race-based remedies either." 256 F.3d at 644, quoting in part VMI, 518 U.S. at 533. The court indicated that the Eleventh Circuit Court of Appeals in the Engineering Contract Association of South Florida, Inc. v. Metropolitan Dade County, 122 F.3d 895, 910 (11th Cir. 1997) decision created the "paradox that a public agency can provide stronger remedies for sex discrimination than for race discrimination; it is difficult to see what sense that makes." 256 F.3d at 644. But, since Cook County did not argue for a different standard for the minority and women's "set aside programs," the women's program the court determined must clear the same "hurdles" as the minority program." 256 F.3d at 644-645.

The court found that since the ordinance requires prime contractors on public projects to reserve a substantial portion of the subcontracts for minority contractors, which is inapplicable to private projects, it is "to be expected that there would be more soliciting of these contractors on public than on private projects." Id. Therefore, the court did not find persuasive that there was discrimination based on this difference alone. 256 F.3d at 645. The court pointed out the County "conceded that [it] had no specific evidence of pre-enactment discrimination to support the ordinance." 256 F.3d at 645 quoting the district court decision, 123 F.Supp. 2d at 1093. The court held that a "public agency must have a strong evidentiary basis for thinking a discriminatory remedy appropriate *before* it adopts the remedy." 256 F.3d at 645 (emphasis in original).

The court stated that minority enterprises in the construction industry "tend to be subcontractors, moreover, because as the district court found not clearly erroneously, 123 F.Supp. 2d at 1115, they tend to be new and therefore small and relatively untested — factors not shown to be attributable to discrimination by the County." 256 F.3d at 645. The court held that there was no basis for attributing to the County any discrimination that prime contractors may have engaged in. Id. The court noted that "[i]f prime contractors on County projects were discriminating against minorities and this was known to the County, whose funding of the contracts thus knowingly perpetuated the

discrimination, the County might be deemed sufficiently complicit ... to be entitled to take remedial action." <u>Id</u>. But, the court found "of that there is no evidence either." <u>Id</u>.

The court stated that if the County had been complicit in discrimination by prime contractors, it found "puzzling" to try to remedy that discrimination by requiring discrimination in favor of minority stockholders, as distinct from employees. 256 F.3d at 646. The court held that even if the record made a case for remedial action of the general sort found in the MWBE ordinance by the County, it would "flunk the constitutional test" by not being carefully designed to achieve the ostensible remedial aim and no more. 256 F.3d at 646. The court held that a state and local government that has discriminated just against blacks may not by way of remedy discriminate in favor of blacks and Asian Americans and women. <u>Id</u>. Nor, the court stated, may it discriminate more than is necessary to cure the effects of the earlier discrimination. <u>Id</u>. "Nor may it continue the remedy in force indefinitely, with no effort to determine whether, the remedial purpose attained, continued enforcement of the remedy would be a gratuitous discrimination against nonminority persons." <u>Id</u>. The court, therefore, held that the ordinance was not "narrowly tailored" to the wrong that it seeks to correct. <u>Id</u>.

The court thus found that the County both failed to establish the premise for a racial remedy, and also that the remedy goes further than is necessary to eliminate the evil against which it is directed. 256 F.3d at 647. The court held that the list of "favored minorities" includes groups that have never been subject to significant discrimination by Cook County. <u>Id</u>. The court found it unreasonable to "presume" discrimination against certain groups merely on the basis of having an ancestor who had been born in a particular country. <u>Id</u>. Therefore, the court held the ordinance was overinclusive.

The court found that the County did not make any effort to show that, were it not for a history of discrimination, minorities would have 30 percent, and women 10 percent, of County construction contracts. 256 F.3d at 647. The court also rejected the proposition advanced by the County in this case—"that a comparison of the fraction of minority subcontractors on public and private projects established discrimination against minorities by prime contractors on the latter type of project." 256 F.3d at 647-648.

7. <u>Associated Gen. Contractors v. Drabik</u>, 214 F.3d 730 (6th Cir. 2000), affirming Case No. C2-98-943, 998 WL 812241 (S.D. Ohio 1998)

This case is instructive to the disparity study based on the analysis applied in finding the evidence insufficient to justify an MBE/WBE program, and the application of the narrowly tailored test. The Sixth Circuit Court of Appeals enjoined the enforcement of the state MBE program, and in so doing reversed state court precedent finding the program constitutional. This case affirmed a district court decision enjoining the award of a "set-aside" contract based on the State of Ohio's MBE program with the award of construction contracts. The court held, among other things, that the mere existence of societal discrimination was insufficient to support a racial classification. The court found that the economic data were insufficient and too outdated. The court held the State could not establish a compelling governmental interest and that the statute was not narrowly tailored. The court held, among other things, the statute failed the narrow tailoring test because there was no evidence that the State had considered race-neutral remedies.

The court was mindful of the fact that it was striking down an entire class of programs by declaring the State of Ohio MBE statute in question unconstitutional, and noted that its decision was "not reconcilable" with the Ohio Supreme Court's decision in <u>Ritchie Produce</u>, 707 N.E.2d 871 (Ohio 1999) (upholding the Ohio State MBE Program).

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

This case is instructive to the disparity study because the decision highlights the evidentiary burden imposed by the courts necessary to support a local MBE/WBE program. In addition, the Fifth Circuit permitted the aggrieved contractor to recover lost profits from the City of Jackson, Mississippi due to the City's enforcement of the MBE/WBE program that the court held was unconstitutional.

The Fifth Circuit, applying strict scrutiny, held that the City of Jackson, Mississippi failed to establish a compelling governmental interest to justify its policy placing 15 percent minority participation goals for City construction contracts. In addition, the court held the evidence upon which the City relied was faulty for several reasons, including because it was restricted to the letting of prime contracts by the City under the City's Program, and it did not include an analysis of the availability and utilization of qualified minority subcontractors, the relevant statistical pool in the City's construction projects. Significantly, the court also held that the plaintiff in this case could recover lost profits against the City as damages as a result of being denied a bid award based on the application of the MBE/WBE program.

9. Monterey Mechanical v. Wilson, 125 F.3d 702 (9th Cir. 1997)

This case is instructive in that the Ninth Circuit analyzed and held invalid the enforcement of a MBE/WBE-type program. Although the program at issue utilized the term "goals" as opposed to "quotas," the Ninth Circuit rejected such a distinction, holding "[t]he relevant question is not whether a statute requires the use of such measures, but whether it authorizes or encourages them." The case also is instructive because it found the use of "goals" and the application of "good faith efforts" in connection with achieving goals to trigger strict scrutiny.

Monterey Mechanical Co. (the "plaintiff") submitted the low bid for a construction project for the California Polytechnic State University (the "University"). 125 F.3d 702, 704 (9th Cir. 1994). The University rejected the plaintiff's bid because the plaintiff failed to comply with a state statute requiring prime contractors on such construction projects to subcontract 23 percent of the work to MBE/WBEs or, alternatively, demonstrate good faith outreach efforts. <u>Id.</u> The plaintiff conducted good faith outreach efforts but failed to provide the requisite documentation; the awardee prime contractor did not subcontract any portion of the work to MBE/WBEs but did include documentation of good faith outreach efforts. <u>Id.</u>

Importantly, the University did not conduct a disparity study, and instead argued that because "the 'goal requirements' of the scheme '[did] not involve racial or gender quotas, set-asides or preferences," the University did not need a disparity study. <u>Id.</u> at 705. The plaintiff protested the contract award and sued the University's trustees, and a number of other individuals (collectively the "defendants") alleging the state law was violative of the Equal Protection Clause. <u>Id.</u> The district court denied the plaintiff's motion for an interlocutory injunction and the plaintiff appealed to the Ninth Circuit Court of Appeals. <u>Id.</u>

The defendants first argued that the statute was constitutional because it treated all general contractors alike, by requiring all to comply with the MBE/WBE participation goals. <u>Id.</u> at 708. The court held, however, that a minority or women business enterprise could satisfy the participation goals by allocating the requisite percentage of work to itself. <u>Id.</u> at 709. The court held that contrary to the district court's finding, such a difference was not *de minimis*. <u>Id.</u>

The defendant's also argued that the statute was not subject to strict scrutiny because the statute did not impose rigid quotas, but rather only required good faith outreach efforts. <u>Id.</u> at 710. The court rejected the argument finding that although the statute permitted awards to bidders who did not meet the percentage goals, "they are rigid in requiring precisely described and monitored efforts to attain those goals." <u>Id.</u> The court cited its own earlier precedent to hold that "the provisions are not immunized from scrutiny because they purport to establish goals rather than quotas ... [T]he relevant question is not whether a statute requires the use of such measures, but whether it authorizes or encourages them." <u>Id.</u> at 710-11 (internal citations and quotations omitted). The court found that the statute encouraged set asides and cited <u>Concrete Works of Colorado v. Denver</u>, 36 F.3d 1512 (10th Cir. 1994), as analogous support for the proposition. <u>Id.</u> at 711.

The court found that the statute treated contractors differently based upon their race, ethnicity and gender, and although "worded in terms of goals and good faith, the statute imposes mandatory requirements with concreteness." <u>Id.</u> The court also noted that the statute may impose additional

compliance expenses upon non-MBE/WBE firms who are required to make good faith outreach efforts (e.g., advertising) to MBE/WBE firms. <u>Id.</u> at 712.

The court then conducted strict scrutiny (race), and an intermediate scrutiny (gender) analyses. <u>Id.</u> at 712-13. The court found the University presented "no evidence" to justify the race- and gender-based classifications and thus did not consider additional issues of proof. <u>Id.</u> at 713. The court found that the statute was not narrowly tailored because the definition of "minority" was overbroad (e.g., inclusion of Aleuts). <u>Id.</u> at 714, citing <u>Wygant v. Jackson Board of Education</u>, 476 U.S. 267, 284, n. 13 (1986) and <u>City of Richmond v. J.A. Croson, Co.</u>, 488 U.S. 469, 505-06 (1989). The court found "[a] broad program that sweeps in all minorities with a remedy that is in no way related to past harms cannot survive constitutional scrutiny." <u>Id.</u> at 714, citing <u>Hopwood v. State of Texas</u>, 78 F.3d 932, 951 (5th Cir. 1996). The court held that the statute violated the Equal Protection Clause.

10. <u>Eng'g Contractors Ass'n of S. Florida v. Metropolitan Dade County</u>, 122 F.3d 895 (11th Cir. 1997)

<u>Association</u> is a paramount case in the Eleventh Circuit and is instructive to the disparity study. This decision has been cited and applied by the courts in various circuits that have addressed MBE/WBE-type programs or legislation involving local government contracting and procurement.

In <u>Engineering Contractors Association</u>, six trade organizations (the "plaintiffs") filed suit in the district court for the Southern District of Florida, challenging three affirmative action programs administered by Engineering Contractors Association, Florida, (the "County") as violative of the Equal Protection Clause. 122 F.3d 895, 900 (11th Cir. 1997). The three affirmative action programs challenged were the Black Business Enterprise program ("BBE"), the Hispanic Business Enterprise program ("HBE"), and the Woman Business Enterprise program, ("WBE"), (collectively "MWBE" programs). <u>Id.</u> The plaintiffs challenged the application of the program to County construction contracts. <u>Id.</u>

For certain classes of construction contracts valued over \$25,000, the County set participation goals of 15 percent for BBEs, 19 percent for HBEs, and 11 percent for WBEs. <u>Id.</u> at 901. The County established five "contract measures" to reach the participation goals: (1) set asides, (2) subcontractor goals, (3) project goals, (4) bid preferences, and (5) selection factors. Once a contract was identified as covered by a participation goal, a review committee would determine whether a contract measure should be utilized. <u>Id.</u> The County Commission would make the final determination and its decision was appealable to the County Manager. <u>Id.</u> The County reviewed the efficacy of the MWBE programs every five years. <u>Id.</u>

In a bench trial, the district court applied strict scrutiny to the BBE and HBE programs and held that the County lacked the requisite "strong basis in evidence" to support the race- and ethnicity-conscious measures. <u>Id.</u> at 902. The district court applied intermediate scrutiny to the WBE program and found that the "County had presented insufficient probative evidence to support its stated rationale for implementing a gender preference." <u>Id.</u> Therefore, the County had failed to demonstrate a "compelling interest" necessary to support the BBE and HBE programs, and failed to demonstrate an "important interest" necessary to support the WBE program. <u>Id.</u> The district court assumed the

existence of a sufficient evidentiary basis to support the existence of the MWBE programs but held the BBE and HBE programs were not narrowly tailored to the interests they purported to serve; the district court held the WBE program was not substantially related to an important government interest. <u>Id.</u> The district court entered a final judgment enjoining the County from continuing to operate the MWBE programs and the County appealed. The Eleventh Circuit Court of Appeals affirmed. <u>Id.</u> at 900, 903.

On appeal, the Eleventh Circuit considered four major issues:

- 1. Whether the plaintiffs had standing. [The Eleventh Circuit answered this in the affirmative and that portion of the opinion is omitted from this summary];
- 2. Whether the district court erred in finding the County lacked a "strong basis in evidence" to justify the existence of the BBE and HBE programs;
- 3. Whether the district court erred in finding the County lacked a "sufficient probative basis in evidence" to justify the existence of the WBE program; and
- 4. Whether the MWBE programs were narrowly tailored to the interests they were purported to serve.

Id. at 903.

The Eleventh Circuit held that the BBE and HBE programs were subject to the strict scrutiny standard enunciated by the U.S. Supreme Court in <u>City of Richmond v. J.A. Croson Co.</u>, 488 U.S. 469 (1989). <u>Id.</u> at 906. Under this standard, "an affirmative action program must be based upon a 'compelling government interest' and must be 'narrowly tailored' to achieve that interest." <u>Id.</u> The Eleventh Circuit further noted:

In practice, the interest that is alleged in support of racial preferences is almost always the same — remedying past or present discrimination. That interest is widely accepted as compelling. As a result, the true test of an affirmative action program is usually not the nature of the government's interest, but rather the adequacy of the evidence of discrimination offered to show that interest.

Id. (internal citations omitted).

Therefore, strict scrutiny requires a finding of a "strong basis in evidence' to support the conclusion that remedial action is necessary." <u>Id.</u>, citing <u>Croson</u>, 488 U.S. at 500). The requisite "strong basis in evidence' cannot rest on 'an amorphous claim of societal discrimination, on simple legislative assurances of good intention, or on congressional findings of discrimination in the national economy." <u>Id.</u> at 907, citing <u>Ensley Branch</u>, <u>NAACPv</u>. <u>Seibels</u>, 31 F.3d 1548, 1565 (11th Cir. 1994) (citing and applying Croson)). However, the Eleventh Circuit found that a governmental entity can "justify affirmative action by demonstrating 'gross statistical disparities' between the proportion of minorities hired ... and the proportion of minorities willing and able to do the work ... Anecdotal evidence may also be used to document discrimination, especially if buttressed by relevant statistical evidence." <u>Id.</u> (internal citations omitted).

Notwithstanding the "exceedingly persuasive justification" language utilized by the Supreme Court in <u>United States v. Virginia</u>, 116 S. Ct. 2264 (1996) (evaluating gender-based government action), the Eleventh Circuit held that the WBE program was subject to traditional intermediate scrutiny. <u>Id.</u> at 908. Under this standard, the government must provide "sufficient probative evidence" of discrimination, which is a lesser standard than the "strong basis in evidence" under strict scrutiny. <u>Id.</u> at 910.

The County provided two types of evidence in support of the MWBE programs: (1) statistical evidence, and (2) non-statistical "anecdotal" evidence. <u>Id.</u> at 911. As an initial matter, the Eleventh Circuit found that in support of the BBE program, the County permissibly relied on substantially "post-enactment" evidence (i.e., evidence based on data related to years following the initial enactment of the BBE program). <u>Id.</u> However, "such evidence carries with it the hazard that the program at issue may itself be masking discrimination that might otherwise be occurring in the relevant market." <u>Id.</u> at 912. A district court should not "speculate about what the data *might* have shown had the BBE program never been enacted." <u>Id.</u>

The statistical evidence. The County presented five basic categories of statistical evidence: (1) County contracting statistics; (2) County subcontracting statistics; (3) marketplace data statistics; (4) The Wainwright Study; and (5) The Brimmer Study. <u>Id.</u> In summary, the Eleventh Circuit held that the County's statistical evidence (described more fully below) was subject to more than one interpretation. <u>Id.</u> at 924. The district court found that the evidence was "insufficient to form the requisite strong basis in evidence for implementing a racial or ethnic preference, and that it was insufficiently probative to support the County's stated rationale for imposing a gender preference." <u>Id.</u> The district court's view of the evidence was a permissible one. <u>Id.</u>

County contracting statistics. The County presented a study comparing three factors for County non-procurement construction contracts over two time periods (1981-1991 and 1993): (1) the percentage of bidders that were MWBE firms; (2) the percentage of awardees that were MWBE firms; and (3) the proportion of County contract dollars that had been awarded to MWBE firms. <u>Id.</u> at 912.

The Eleventh Circuit found that notably, for the BBE and HBE statistics, generally there were no "consistently negative disparities between the bidder and awardee percentages. In fact, by 1993, the BBE and HBE bidders are being awarded *more* than their proportionate 'share' … when the bidder percentages are used as the baseline." <u>Id.</u> at 913. For the WBE statistics, the bidder/awardee statistics were "decidedly mixed" as across the range of County construction contracts. <u>Id.</u>

The County then refined those statistics by adding in the total percentage of annual County construction dollars awarded to MBE/WBEs, by calculating "disparity indices" for each program and classification of construction contract. The Eleventh Circuit explained:

[A] disparity index compares the amount of contract awards a group actually got to the amount we would have expected it to get based on that group's bidding activity and awardee success rate. More specifically, a disparity index measures the participation of a group in County contracting dollars by dividing that group's

contract dollar percentage by the related bidder or awardee percentage, and multiplying that number by 100 percent.

<u>Id.</u> at 914. "The utility of disparity indices or similar measures ... has been recognized by a number of federal circuit courts." <u>Id.</u>

The Eleventh Circuit found that "[i]n general ... disparity indices of 80 percent or greater, which are close to full participation, are not considered indications of discrimination." <u>Id.</u> The Eleventh Circuit noted that "the EEOC's disparate impact guidelines use the 80 percent test as the boundary line for determining a prima facie case of discrimination." <u>Id.</u>, citing 29 C.F.R. § 1607.4D. In addition, no circuit that has "explicitly endorsed the use of disparity indices [has] indicated that an index of 80 percent or greater might be probative of discrimination." <u>Id.</u>, citing <u>Concrete Works v. City & County of Denver</u>, 36 F.3d 1513, 1524 (10th Cir. 1994) (crediting disparity indices ranging from 0% to 3.8%); <u>Contractors Ass'n v. City of Philadelphia</u>, 6 F.3d 990 (3d Cir. 1993) (crediting disparity index of 4%).

After calculation of the disparity indices, the County applied a standard deviation analysis to test the statistical significance of the results. <u>Id.</u> at 914. "The standard deviation figure describes the probability that the measured disparity is the result of mere chance." <u>Id.</u> The Eleventh Circuit had previously recognized "[s]ocial scientists consider a finding of two standard deviations significant, meaning there is about one chance in 20 that the explanation for the deviation could be random and the deviation must be accounted for by some factor other than chance." <u>Id.</u>

The statistics presented by the County indicated "statistically significant underutilization of BBEs in County construction contracting." <u>Id.</u> at 916. The results were "less dramatic" for HBEs and mixed as between favorable and unfavorable for WBEs. <u>Id.</u>

The Eleventh Circuit then explained the burden of proof:

[O]nce the proponent of affirmative action introduces its statistical proof as evidence of its remedial purpose, thereby supplying the [district] court with the means for determining that [it] had a firm basis for concluding that remedial action was appropriate, it is incumbent upon the [plaintiff] to prove their case; they continue to bear the ultimate burden of persuading the [district] court that the [defendant's] evidence did not support an inference of prior discrimination and thus a remedial purpose, or that the plan instituted on the basis of this evidence was not sufficiently 'narrowly tailored.'

Id. (internal citations omitted).

The Eleventh Circuit noted that a plaintiff has at least three methods to rebut the inference of discrimination with a "neutral explanation" by: "(1) showing that the statistics are flawed; (2) demonstrating that the disparities shown by the statistics are not significant or actionable; or (3) presenting contrasting statistical data." <u>Id.</u> (internal quotations and citations omitted). The Eleventh

Circuit held that the plaintiffs produced "sufficient evidence to establish a neutral explanation for the disparities." <u>Id.</u>

The plaintiffs alleged that the disparities were "better explained by firm size than by discrimination ... [because] minority and female-owned firms tend to be smaller, and that it stands to reason smaller firms will win smaller contracts." <u>Id.</u> at 916-17. The plaintiffs produced Census data indicating, on average, minority- and female-owned construction firms in Engineering Contractors Association were smaller than non-MBE/WBE firms. <u>Id.</u> at 917. The Eleventh Circuit found that the plaintiff's explanation of the disparities was a "plausible one, in light of the uncontroverted evidence that MBE/WBE construction firms tend to be substantially smaller than non-MBE/WBE firms." <u>Id.</u>

Additionally, the Eleventh Circuit noted that the County's own expert admitted that "firm size plays a significant role in determining which firms win contracts." <u>Id.</u> The expert stated:

The size of the firm has got to be a major determinant because of course some firms are going to be larger, are going to be better prepared, are going to be in a greater natural capacity to be able to work on some of the contracts while others simply by virtue of their small size simply would not be able to do it. <u>Id.</u>

The Eleventh Circuit then summarized:

Because they are bigger, bigger firms have a bigger chance to win bigger contracts. It follows that, all other factors being equal and in a perfectly nondiscriminatory market, one would expect the bigger (on average) non-MWBE firms to get a disproportionately higher percentage of total construction dollars awarded than the smaller MWBE firms, Id.

In an anticipation of such an argument, the County conducted a regression analysis to control for firm size. <u>Id.</u> A regression analysis is "a statistical procedure for determining the relationship between a dependent and independent variable, e.g., the dollar value of a contract award and firm size." <u>Id.</u> (internal citations omitted). The purpose of the regression analysis is "to determine whether the relationship between the two variables is statistically meaningful." <u>Id.</u>

The County's regression analysis sought to identify disparities that could not be explained by firm size, and theoretically instead based on another factor, such as discrimination. <u>Id.</u> The County conducted two regression analyses using two different proxies for firm size: (1) total awarded value of all contracts bid on; and (2) largest single contract awarded. <u>Id.</u> The regression analyses accounted for most of the negative disparities regarding MBE/WBE participation in County construction contracts (i.e., most of the unfavorable disparities became statistically insignificant, corresponding to standard deviation values less that two). <u>Id.</u>

Based on an evaluation of the regression analysis, the district court held that the demonstrated disparities were attributable to firm size as opposed to discrimination. <u>Id.</u> at 918. The district court concluded that the few unexplained disparities that remained after regressing for firm size were

insufficient to provide the requisite "strong basis in evidence" of discrimination of BBEs and HBEs. <u>Id.</u> The Eleventh Circuit held that this decision was not clearly erroneous. <u>Id.</u>

With respect to the BBE statistics, the regression analysis explained all but one negative disparity, for one type of construction contract between 1989-1991. <u>Id.</u> The Eleventh Circuit held the district court permissibly found that this did not constitute a "strong basis in evidence" of discrimination. <u>Id.</u>

With respect to the HBE statistics, one of the regression methods failed to explain the unfavorable disparity for one type of contract between 1989-1991, and both regression methods failed to explain the unfavorable disparity for another type of contract during that same time period. <u>Id.</u> However, by 1993, both regression methods accounted for all of the unfavorable disparities, and one of the disparities for one type of contract was actually favorable for HBEs. <u>Id.</u> The Eleventh Circuit held the district court permissibly found that this did not constitute a "strong basis in evidence" of discrimination. <u>Id.</u>

Finally, with respect to the WBE statistics, the regression analysis explained all but one negative disparity, for one type of construction contract in the 1993 period. <u>Id.</u> The regression analysis explained all of the other negative disparities, and in the 1993 period, a disparity for one type of contract was actually favorable to WBEs. <u>Id.</u> The Eleventh Circuit held the district court permissibly found that this evidence was not "sufficiently probative of discrimination." <u>Id.</u>

The County argued that the district court erroneously relied on the disaggregated data (i.e., broken down by contract type) as opposed to the consolidated statistics. <u>Id.</u> at 919. The district court declined to assign dispositive weight to the aggregated data for the BBE statistics for 1989-1991 because (1) the aggregated data for 1993 did not show negative disparities when regressed for firm size, (2) the BBE disaggregated data left only one unexplained negative disparity for one type of contract for 1989-1991 when regressed for firm size, and (3) "the County's own expert testified as to the utility of examining the disaggregated data 'insofar as they reflect different kinds of work, different bidding practices, perhaps a variety of other factors that could make them heterogeneous with one another." Id.

Additionally, the district court noted, and the Eleventh Circuit found that "the aggregation of disparity statistics for nonheterogenous data populations can give rise to a statistical phenomenon known as 'Simpson's Paradox,' which leads to illusory disparities in improperly aggregated data that disappear when the data are disaggregated." <u>Id.</u> at 919, n. 4 (internal citations omitted). "Under those circumstances," the Eleventh Circuit held that the district court did not err in assigning less weight to the aggregated data, in finding the aggregated data for BBEs for 1989-1991 did not provide a "strong basis in evidence" of discrimination, or in finding that the disaggregated data formed an insufficient basis of support for any of the MBE/WBE programs given the applicable constitutional requirements. <u>Id.</u> at 919.

County subcontracting statistics. The County performed a subcontracting study to measure MBE/WBE participation in the County's subcontracting businesses. For each MBE/WBE category (BBE, HBE, and WBE), "the study compared the proportion of the designated group that filed a subcontractor's release of lien on a County construction project between 1991 and 1994 with the proportion of sales and receipt dollars that the same group received during the same time period." <u>Id.</u>

The district court found the statistical evidence insufficient to support the use of race- and ethnicity-conscious measures, noting problems with some of the data measures. <u>Id.</u> at 920.

Most notably, the denominator used in the calculation of the MWBE sales and receipts percentages is based upon the total sales and receipts from all sources for the firm filing a subcontractor's release of lien with the County. That means, for instance, that if a nationwide non-MWBE company performing 99 percent of its business outside of Dade County filed a single subcontractor's release of lien with the County during the relevant time frame, all of its sales and receipts for that time frame would be counted in the denominator against which MWBE sales and receipts are compared. As the district court pointed out, that is not a reasonable way to measure Dade County subcontracting participation.

<u>Id.</u> The County's argument that a strong majority (72%) of the subcontractors were located in Dade County did not render the district court's decision to fail to credit the study erroneous. <u>Id.</u>

Marketplace data statistics. The County conducted another statistical study "to see what the differences are in the marketplace and what the relationships are in the marketplace." <u>Id.</u> The study was based on a sample of 568 contractors, from a pool of 10,462 firms, that had filed a "certificate of competency" with Dade County as of January 1995. <u>Id.</u> The selected firms participated in a telephone survey inquiring about the race, ethnicity, and gender of the firm's owner, and asked for information on the firm's total sales and receipts from all sources. <u>Id.</u> The County's expert then studied the data to determine "whether meaningful relationships existed between (1) the race, ethnicity, and gender of the surveyed firm owners, and (2) the reported sales and receipts of that firm. <u>Id.</u> The expert's hypothesis was that unfavorable disparities may be attributable to marketplace discrimination. The expert performed a regression analysis using the number of employees as a proxy for size. <u>Id.</u>

The Eleventh Circuit first noted that the statistical pool used by the County was substantially larger than the actual number of firms, willing, able, and qualified to do the work as the statistical pool represented all those firms merely licensed as a construction contractor. <u>Id.</u> Although this factor did not render the study meaningless, the district court was entitled to consider that in evaluating the weight of the study. <u>Id.</u> at 921. The Eleventh Circuit quoted the Supreme Court for the following proposition: "[w]hen special qualifications are required to fill particular jobs, comparisons to the general population (rather than to the smaller group of individuals who possess the necessary qualifications) may have little probative value." <u>Id.</u>, quoting <u>Croson</u>, 488 U.S. at 501, quoting <u>Hazelwood Sch. Dist. v. United States</u>, 433 U.S. 299, 308 n. 13 (1977).

The Eleventh Circuit found that after regressing for firm size, neither the BBE nor WBE data showed statistically significant unfavorable disparities. <u>Id.</u> Although the marketplace data did reveal unfavorable disparities even after a regression analysis, the district court was not required to assign those disparities controlling weight, especially in light of the dissimilar results of the County Contracting Statistics, discussed <u>supra</u>. <u>Id.</u>

The Wainwright Study. The County also introduced a statistical analysis prepared by Jon Wainwright, analyzing "the personal and financial characteristics of self-employed persons working full-time in the Dade County construction industry, based on data from the 1990 Public Use Microdata Sample database" (derived from the decennial census). <u>Id.</u> The study "(1) compared construction business ownership rates of MBE/WBEs to those of non-MBE/WBEs, and (2) analyzed disparities in personal income between MBE/WBE and non-MBE/WBE business owners." <u>Id.</u> "The study concluded that blacks, Hispanics, and women are less likely to own construction businesses than similarly situated white males, and MBE/WBEs that do enter the construction business earn less money than similarly situated white males." <u>Id.</u>

With respect to the first conclusion, Wainwright controlled for "human capital" variables (education, years of labor market experience, marital status, and English proficiency) and "financial capital" variables (interest and dividend income, and home ownership). <u>Id.</u> The analysis indicated that blacks, Hispanics and women enter the construction business at lower rates than would be expected, once numerosity, and identified human and financial capital are controlled for. <u>Id.</u> The disparities for blacks and women (but not Hispanics) were substantial and statistically significant. <u>Id.</u> at 922. The underlying theory of this business ownership component of the study is that any significant disparities remaining after control of variables are due to the ongoing effects of past and present discrimination. <u>Id.</u>

The Eleventh Circuit held, in light of <u>Croson</u>, the district court need not have accepted this theory. <u>Id.</u> The Eleventh Circuit quoted <u>Croson</u>, in which the Supreme Court responded to a similar argument advanced by the plaintiffs in that case: "There are numerous explanations for this dearth of minority participation, including past societal discrimination in education and economic opportunities as well as both black and white career and entrepreneurial choices. Blacks may be disproportionately attracted to industries other than construction." <u>Id.</u>, quoting <u>Croson</u>, 488 U.S. at 503. Following the Supreme Court in <u>Croson</u>, the Eleventh Circuit held "the disproportionate attraction of a minority group to non-construction industries does not mean that discrimination in the construction industry is the reason." <u>Id.</u>, quoting <u>Croson</u>, 488 U.S. at 503. Additionally, the district court had evidence that between 1982 and 1987, there was a substantial growth rate of MBE/WBE firms as opposed to non-MBE/WBE firms, which would further negate the proposition that the construction industry was discriminating against minority- and women-owned firms. <u>Id.</u> at 922.

With respect to the personal income component of the Wainwright study, after regression analyses were conducted, only the BBE statistics indicated a statistically significant disparity ratio. <u>Id.</u> at 923. However, the Eleventh Circuit held the district court was not required to assign the disparity controlling weight because the study did not regress for firm size, and in light of the conflicting statistical evidence in the County Contracting Statistics and Marketplace Data Statistics, discussed supra, which did regress for firm size. <u>Id.</u>

The Brimmer Study. The final study presented by the County was conducted under the supervision of Dr. Andrew F. Brimmer and concerned only black-owned firms. <u>Id.</u> The key component of the study was an analysis of the business receipts of black-owned construction firms for the years of 1977, 1982 and 1987, based on the Census Bureau's Survey of Minority- and Women-Owned Businesses, produced every five years. <u>Id.</u> The study sought to determine the existence of disparities between sales and receipts of black-owned firms in Dade County compared to the sales and receipts of all construction firms in Dade County. <u>Id.</u>

The study indicated substantial disparities in 1977 and 1987 but not 1982. <u>Id.</u> The County alleged that the absence of disparity in 1982 was due to substantial race-conscious measures for a major construction contract (Metrorail project), and not due to a lack of discrimination in the industry. <u>Id.</u> However, the study made no attempt to filter for the Metrorail project and "complete[ly] fail[ed]" to account for firm size. <u>Id.</u> Accordingly, the Eleventh Circuit found the district court permissibly discounted the results of the Brimmer study. <u>Id.</u> at 924.

Anecdotal evidence. In addition, the County presented a substantial amount of anecdotal evidence of perceived discrimination against BBEs, a small amount of similar anecdotal evidence pertaining to WBEs, and no anecdotal evidence pertaining to HBEs. <u>Id.</u> The County presented three basic forms of anecdotal evidence: "(1) the testimony of two County employees responsible for administering the MBE/WBE programs; (2) the testimony, primarily by affidavit, of twenty-three MBE/WBE contractors and subcontractors; and (3) a survey of black-owned construction firms." <u>Id.</u>

The County employees testified that the decentralized structure of the County construction contracting system affords great discretion to County employees, which in turn creates the opportunity for discrimination to infect the system. <u>Id.</u> They also testified to specific incidents of discrimination, for example, that MBE/WBEs complained of receiving lengthier punch lists than their non-MBE/WBE counterparts. <u>Id.</u> They also testified that MBE/WBEs encounter difficulties in obtaining bonding and financing. <u>Id.</u>

The MBE/WBE contractors and subcontractors testified to numerous incidents of perceived discrimination in the Dade County construction market, including:

Situations in which a project foreman would refuse to deal directly with a black or female firm owner, instead preferring to deal with a white employee; instances in which an MWBE owner knew itself to be the low bidder on a subcontracting project, but was not awarded the job; instances in which a low bid by an MWBE was "shopped" to solicit even lower bids from non-MWBE firms; instances in which an MWBE owner received an invitation to bid on a subcontract within a day of the bid due date, together with a "letter of unavailability" for the MWBE owner to sign in order to obtain a waiver from the County; and instances in which an MWBE subcontractor was hired by a prime contractor, but subsequently was replaced with a non-MWBE subcontractor within days of starting work on the project.

Id. at 924-25.

Finally, the County submitted a study prepared by Dr. Joe E. Feagin, comprised of interviews of 78 certified black-owned construction firms. <u>Id.</u> at 925. The interviewees reported similar instances of perceived discrimination, including: "difficulty in securing bonding and financing; slow payment by general contractors; unfair performance evaluations that were tainted by racial stereotypes; difficulty in obtaining information from the County on contracting processes; and higher prices on equipment and supplies than were being charged to non-MBE/WBE firms." <u>Id.</u>

The Eleventh Circuit found that numerous black- and some female-owned construction firms in Dade County perceived that they were the victims of discrimination and two County employees also believed that discrimination could taint the County's construction contracting process. <u>Id.</u> However, such anecdotal evidence is helpful "only when it [is] combined with and reinforced by sufficiently probative statistical evidence." <u>Id.</u> In her plurality opinion in <u>Croson</u>, Justice O'Connor found that "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." <u>Id.</u>, quoting <u>Croson</u>, 488 U.S. at 509 (emphasis added by the Eleventh Circuit). Accordingly, the Eleventh Circuit held that "anecdotal evidence can play an important role in bolstering statistical evidence, but that only in the rare case will anecdotal evidence suffice standing alone." <u>Id.</u> at 925. The Eleventh Circuit also cited to opinions from the Third, Ninth and Tenth Circuits as supporting the same proposition. <u>Id.</u> at 926. The Eleventh Circuit affirmed the decision of the district court enjoining the continued operation of the MBE/WBE programs because they did not rest on a "constitutionally sufficient evidentiary foundation." <u>Id.</u>

Although the Eleventh Circuit determined that the MBE/WBE program did not survive constitutional muster due to the absence of a sufficient evidentiary foundation, the Eleventh Circuit proceeded with the second prong of the strict scrutiny analysis of determining whether the MBE/WBE programs were narrowly tailored (BBE and HBE programs) or substantially related (WBE program) to the legitimate government interest they purported to serve, i.e., "remedying the effects of present and past discrimination against blacks, Hispanics, and women in the Dade County construction market." Id.

Narrow tailoring. "The essence of the 'narrowly tailored' inquiry is the notion that explicitly racial preferences ... must only be a 'last resort' option." <u>Id.</u>, quoting <u>Hayes v. North Side Law Enforcement Officers Ass'n</u>, 10 F.3d 207, 217 (4th Cir. 1993) and citing <u>Croson</u>, 488 U.S. at 519 (Kennedy, J., concurring in part and concurring in the judgment) ("[T]he strict scrutiny standard ... forbids the use of even narrowly drawn racial classifications except as a last resort.").

The Eleventh Circuit has identified four factors to evaluate whether a race- or ethnicity-conscious affirmative action program is narrowly tailored: (1) "the necessity for the relief and the efficacy of alternative remedies; (2) the flexibility and duration of the relief; (3) the relationship of numerical goals to the relevant labor market; and (4) the impact of the relief on the rights of innocent third parties." <u>Id.</u> at 927, citing <u>Ensley Branch</u>, 31 F.3d at 1569. The four factors provide "a useful analytical structure." <u>Id.</u> at 927. The Eleventh Circuit focused only on the first factor in the present case "because that is where the County's MBE/WBE programs are most problematic." <u>Id.</u>

The Eleventh Circuit

flatly reject[ed] the County's assertion that 'given a strong basis in evidence of a race-based problem, a race-based remedy is necessary.' That is simply not the law. If a race-neutral remedy is sufficient to cure a race-based problem, then a race-conscious remedy can never be narrowly tailored to that problem." Id., citing Croson, 488 U.S. at 507 (holding that affirmative action program was not narrowly tailored where "there does not appear to have been any consideration of the use of race-neutral means to increase minority

business participation in city contracting") ... Supreme Court decisions teach that a race-conscious remedy is not merely one of many equally acceptable medications the government may use to treat a race-based problem. Instead, it is the strongest of medicines, with many potential side effects, and must be reserved for those severe cases that are highly resistant to conventional treatment.

Id. at 927.

The Eleventh Circuit held that the County "clearly failed to give serious and good faith consideration to the use of race- and ethnicity-neutral measures." <u>Id.</u> Rather, the determination of the necessity to establish the MWBE programs was based upon a conclusory legislative statement as to its necessity, which in turn was based upon an "equally conclusory analysis" in the Brimmer study, and a report that the SBA only was able to direct 5 percent of SBA financing to black-owned businesses between 1968-1980. <u>Id.</u>

The County admitted, and the Eleventh Circuit concluded, that the County failed to give any consideration to any alternative to the HBE affirmative action program. <u>Id.</u> at 928. Moreover, the Eleventh Circuit found that the testimony of the County's own witnesses indicated the viability of race- and ethnicity-neutral measures to remedy many of the problems facing black- and Hispanic-owned construction firms. <u>Id.</u> The County employees identified problems, virtually all of which were related to the County's own processes and procedures, including: "the decentralized County contracting system, which affords a high level of discretion to County employees; the complexity of County contract specifications; difficulty in obtaining bonding; difficulty in obtaining financing; unnecessary bid restrictions; inefficient payment procedures; and insufficient or inefficient exchange of information." <u>Id.</u> The Eleventh Circuit found that the problems facing MBE/WBE contractors were "institutional barriers" to entry facing every new entrant into the construction market, and were perhaps affecting the MBE/WBE contractors disproportionately due to the "institutional youth" of black- and Hispanic-owned construction firms. <u>Id.</u> "It follows that those firms should be helped the most by dismantling those barriers, something the County could do at least in substantial part." <u>Id.</u>

The Eleventh Circuit noted that the race- and ethnicity-neutral options available to the County mirrored those available and cited by Justice O'Connor in <u>Croson</u>:

[T]he city has at its disposal a whole array of race-neutral measures to increase the accessibility of city contracting opportunities to small entrepreneurs of all races. Simplification of bidding procedures, relaxation of bonding requirements, and training and financial aid for disadvantaged entrepreneurs of all races would open the public contracting market to all those who have suffered the effects of past societal discrimination and neglect ... The city may also act to prohibit discrimination in the provision of credit or bonding by local suppliers and banks.

<u>Id.</u>, quoting Croson, 488 U.S. at 509-10. The Eleventh Circuit found that except for some "half-hearted programs" consisting of "limited technical and financial aid that might benefit BBEs and HBEs," the County had not "seriously considered" or tried most of the race- and ethnicity-neutral

alternatives available. <u>Id.</u> at 928. "Most notably ... the County has not taken any action whatsoever to ferret out and respond to instances of discrimination if and when they have occurred in the County's own contracting process." <u>Id.</u>

The Eleventh Circuit found that the County had taken no steps to "inform, educate, discipline, or penalize" discriminatory misconduct by its own employees. <u>Id.</u> at 929. Nor had the County passed any local ordinances expressly prohibiting discrimination by local contractors, subcontractors, suppliers, bankers, or insurers. <u>Id.</u> "Instead of turning to race- and ethnicity-conscious remedies as a last resort, the County has turned to them as a first resort." Accordingly, the Eleventh Circuit held that even if the BBE and HBE programs were supported by the requisite evidentiary foundation, they violated the Equal Protection Clause because they were not narrowly tailored. <u>Id.</u>

Substantial relationship. The Eleventh Circuit held that due to the relaxed "substantial relationship" standard for gender-conscious programs, if the WBE program rested upon a sufficient evidentiary foundation, it could pass the substantial relationship requirement. <u>Id.</u> However, because it did not rest upon a sufficient evidentiary foundation, the WBE program could not pass constitutional muster. <u>Id.</u>

For all of the foregoing reasons, the Eleventh Circuit affirmed the decision of the district court declaring the MBE/WBE programs unconstitutional and enjoining their continued operation.

11. <u>Associated Gen. Contractors of California, Inc. v. Coalition for Econ. Equity</u> ("AGCC"), 950 F.2d 1401 (9th Cir. 1991)

In <u>Associated Gen. Contractors of California, Inc. v. Coalition for Econ. Equity ("AGCC")</u>, the Ninth Circuit Court of Appeals denied plaintiff's request for preliminary injunction to enjoin enforcement of the city's bid preference program. 950 F.2d 1401 (9th Cir. 1991). Although an older case, the court discussed the utilization of statistical evidence and anecdotal evidence in the context of the strict scrutiny analysis. <u>Id.</u> at 1413-18.

The City of San Francisco adopted an ordinance in 1989 providing bid preferences to prime contractors who were members of groups found disadvantaged by previous bidding practices, and specifically provided a 5 percent bid preference for LBEs, WBEs and MBEs. 950 F.2d at 1405. Local MBEs and WBEs were eligible for a 10 percent total bid preference, representing the cumulative total of the 5 percent preference given LBEs and the 5 percent preference given MBEs and WBEs. Id. The ordinance defined "MBE" as an economically disadvantaged business that was owned and controlled by one or more minority persons, which included Asians, blacks and Latinos. "WBE" was defined as an economically disadvantaged business that was owned and controlled by one or more women. Economically disadvantaged was defined as a business with average gross annual receipts that did not exceed \$14 million. Id.

The Motion for Preliminary Injunction challenged the constitutionality of the MBE provisions of the 1989 Ordinance insofar as it pertained to Public Works construction contracts. <u>Id.</u> at 1405. The district court denied the Motion for Preliminary Injunction on the AGC's constitutional claim on the ground that AGC failed to demonstrate a likelihood of success on the merits. <u>Id.</u> at 1412.

The Ninth Circuit Court of Appeals applied the strict scrutiny analysis following the decision of the U.S. Supreme Court in <u>City of Richmond v. Croson</u>. The court stated that according to the U.S.

Supreme Court in <u>Croson</u>, a municipality has a compelling interesting in redressing not only discrimination committed by the municipality itself, but also discrimination committed by private parties within the municipality legislative jurisdiction, so long as the municipality in some way perpetuated the discrimination to be remedied by the program. <u>Id</u>. at 1412-13, citing <u>Croson</u> at 488 U.S. at 491-92, 537-38. To satisfy this requirement, "the governmental actor need not be an active perpetrator of such discrimination; passive participation will satisfy this sub-part of strict scrutiny review." <u>Id</u>. at 1413, quoting <u>Coral Construction Company v. King County</u>, 941 F.2d 910 at 916 (9th Cir. 1991). In addition, the [m]ere infusion of tax dollars into a discriminatory industry may be sufficient governmental involvement to satisfy this prong." <u>Id</u>. at 1413 quoting <u>Coral Construction</u>, 941 F.2d at 916.

The court pointed out that the City had made detailed findings of prior discrimination in construction and building within its borders, had testimony taken at more than ten public hearings and received numerous written submissions from the public as part of its anecdotal evidence. <u>Id.</u> at 1414. The city departments continued to discriminate against MBEs and WBEs and continued to operate under the "old boy network" in awarding contracts, thereby disadvantaging MBEs and WBEs. <u>Id.</u> And, the City found that large statistical disparities existed between the percentage of contracts awarded to MBEs and the percentage of available MBEs. 950 F.2d at 1414. The court stated the City also found "discrimination in the private sector against MBEs and WBEs that is manifested in and exacerbated by the City's procurement practices." <u>Id.</u> at 1414.

The Ninth Circuit found the study commissioned by the City indicated the existence of large disparities between the award of city contracts to available non-minority businesses and to MBEs. Id. at 1414. Using the City and County of San Francisco as the "relevant market," the study compared the number of available MBE prime construction contractors in San Francisco with the amount of contract dollars awarded by the City to San Francisco-based MBEs for a particular year. Id. at 1414. The study found that available MBEs received far fewer city contracts in proportion to their numbers than their available non-minority counterparts. Id. Specifically, the study found that with respect to prime construction contracting, disparities between the number of available local Asian-, black- and Hispanic-owned firms and the number of contracts awarded to such firms were statistically significant and supported an inference of discrimination. Id. For example, in prime contracting for construction, although MBE availability was determined to be at 49.5 percent, MBE dollar participation was only 11.1 percent. Id. The Ninth Circuit stated than in its decision in Coral Construction, it emphasized that such statistical disparities are "an invaluable tool and demonstrating the discrimination necessary to establish a compelling interest. Id. at 1414, citing to Coral Construction, 941 F.2d at 918 and Croson, 488 U.S. at 509.

The court noted that the record documents a vast number of individual accounts of discrimination, which bring "the cold numbers convincingly to life." <u>Id</u>. at 1414, quoting <u>Coral Construction</u>, 941 F.2d at 919. These accounts include numerous reports of MBEs being denied contracts despite being the low bidder, MBEs being told they were not qualified although they were later found qualified when evaluated by outside parties, MBEs being refused work even after they were awarded contracts as low bidder, and MBEs being harassed by city personnel to discourage them from bidding on city contracts. <u>Id</u> at 1415. The City pointed to numerous individual accounts of discrimination, that an "old boy network" still exists, and that racial discrimination is still prevalent within the San Francisco construction industry. <u>Id</u>. The court found that such a "combination of convincing anecdotal and statistical evidence is potent." <u>Id</u>. at 1415 quoting <u>Coral Construction</u>, 941 F.2d at 919.

The court also stated that the 1989 Ordinance applies only to resident MBEs. The City, therefore, according to the court, appropriately confined its study to the city limits in order to focus on those whom the preference scheme targeted. <u>Id.</u> at 1415. The court noted that the statistics relied upon by the City to demonstrate discrimination in its contracting processes considered only MBEs located within the City of San Francisco. <u>Id.</u>

The court pointed out the City's findings were based upon dozens of specific instances of discrimination that are laid out with particularity in the record, as well as the significant statistical disparities in the award of contracts. The court noted that the City must simply demonstrate the existence of past discrimination with specificity, but there is no requirement that the legislative findings specifically detail each and every incidence that the legislative body has relied upon in support of this decision that affirmative action is necessary. <u>Id</u>. at 1416.

In its analysis of the "narrowly tailored" requirement, the court focused on three characteristics identified by the decision in <u>Croson</u> as indicative of narrow tailoring. First, an MBE program should be instituted either after, or in conjunction with, race-neutral means of increasing minority business participation in public contracting. <u>Id</u>. at 1416. Second, the plan should avoid the use of "rigid numerical quotas." <u>Id</u>. According to the Supreme Court, systems that permit waiver in appropriate cases and therefore require some individualized consideration of the applicants pose a lesser danger of offending the Constitution. <u>Id</u>. Mechanisms that introduce flexibility into the system also prevent the imposition of a disproportionate burden on a few individuals. <u>Id</u>. Third, "an MBE program must be limited in its effective scope to the boundaries of the enacting jurisdiction. <u>Id</u>. at 1416 quoting <u>Coral Construction</u>, 941 F.2d at 922.

The court found that the record showed the City considered, but rejected as not viable, specific race-neutral alternatives including a fund to assist newly established MBEs in meeting bonding requirements. The court stated that "while strict scrutiny requires serious, good faith consideration of race-neutral alternatives, strict scrutiny does not require exhaustion of every possible such alternative ... however irrational, costly, unreasonable, and unlikely to succeed such alternative may be." Id. at 1417 quoting Coral Construction, 941 F2d at 923. The court found the City ten years before had attempted to eradicate discrimination in city contracting through passage of a race-neutral ordinance that prohibited city contractors from discriminating against their employees on the basis of race and required contractors to take steps to integrate their work force; and that the City made and continues to make efforts to enforce the anti-discrimination ordinance. Id. at 1417. The court stated inclusion of such race-neutral measures is one factor suggesting that an MBE plan is narrowly tailored. Id. at 1417.

The court also found that the Ordinance possessed the requisite flexibility. Rather than a rigid quota system, the City adopted a more modest system according to the court, that of bid preferences. <u>Id.</u> at 1417. The court pointed out that there were no goals, quotas, or set-asides and moreover, the plan remedies only specifically identified discrimination: the City provides preferences only to those minority groups found to have previously received a lower percentage of specific types of contracts than their availability to perform such work would suggest. <u>Id.</u> at 1417.

The court rejected the argument of AGCC that to pass constitutional muster any remedy must provide redress only to specific individuals who have been identified as victims of discrimination. <u>Id.</u> at 1417, n. 12. The Ninth Circuit agreed with the district court that an iron-clad requirement

limiting any remedy to individuals personally proven to have suffered prior discrimination would render any race-conscious remedy "superfluous," and would thwart the Supreme Court's directive in Croson that race-conscious remedies may be permitted in some circumstances. <u>Id.</u> at 1417, n.12. The court also found that the burdens of the bid preferences on those not entitled to them appear "relatively light and well distributed." <u>Id.</u> at 1417. The court stated that the Ordinance was "limited in its geographical scope to the boundaries of the enacting jurisdiction. <u>Id.</u> at 1418, quoting <u>Coral Construction</u>, 941 F.2d at 925. The court found that San Francisco had carefully limited the ordinance to benefit only those MBEs located within the City's borders. <u>Id.</u> 1418.

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

In <u>Coral Construction Co. v. King County</u>, 941 F.2d 910 (9th Cir. 1991), the Ninth Circuit examined the constitutionality of King County, Washington's minority and women business set-aside program in light of the standard set forth in <u>City of Richmond v. J.A. Croson Co.</u> The court held that although the County presented ample anecdotal evidence of disparate treatment of MBE contractors and subcontractors, the total absence of pre-program enactment statistical evidence was problematic to the compelling government interest component of the strict scrutiny analysis. The court remanded to the district court for a determination of whether the post-program enactment studies constituted a sufficient compelling government interest. Per the narrow tailoring prong of the strict scrutiny test, the court found that although the program included race-neutral alternative measures and was flexible (i.e., included a waiver provision), the over breadth of the program to include MBEs outside of King County was fatal to the narrow tailoring analysis.

The court also remanded on the issue of whether the plaintiffs were entitled to damages under 42 U.S.C. §§ 1981 and 1983, and in particular to determine whether evidence of causation existed. With respect to the WBE program, the court held the plaintiff had standing to challenge the program, and applying the intermediate scrutiny analysis, held the WBE program survived the facial challenge.

In finding the absence of any statistical data in support of the County's MBE Program, the court made it clear that statistical analyses have served and will continue to serve an important role in cases in which the existence of discrimination is a disputed issue. 941 F.2d at 918. The court noted that it has repeatedly approved the use of statistical proof to establish a prima facia case of discrimination. Id. The court pointed out that the U.S. Supreme Court in Croson held that where "gross statistical disparities can be shown, they alone may in a proper case constitute prima facie proof of a pattern or practice of discrimination." Id. at 918, quoting Hazelwood School Dist. v. United States, 433 U.S. 299, 307-08, and Croson, 488 U.S. at 501.

The court points out that statistical evidence may not fully account for the complex factors and motivations guiding employment decisions, many of which may be entirely race-neutral. <u>Id</u>. at 919. The court noted that the record contained a plethora of anecdotal evidence, but that anecdotal evidence, standing alone, suffers the same flaws as statistical evidence. <u>Id</u>. at 919. While anecdotal evidence may suffice to prove individual claims of discrimination, rarely, according to the court, if ever, can such evidence show a systemic pattern of discrimination necessary for the adoption of an affirmative action plan. <u>Id</u>.

Nonetheless, the court held that the combination of convincing anecdotal and statistical evidence is potent. <u>Id</u>. at 919. The court pointed out that individuals who testified about their personal experiences brought the cold numbers of statistics "convincingly to life." <u>Id</u>. at 919, quoting <u>International Brotherhood of Teamsters v. United States</u>, 431 U.S 324, 339 (1977). The court also pointed out that the Eleventh Circuit Court of Appeals, in passing upon a minority set aside program similar to the one in King County, concluded that the testimony regarding complaints of discrimination combined with the gross statistical disparities uncovered by the County studies provided more than enough evidence on the question of prior discrimination and need for racial classification to justify the denial of a Motion for Summary Judgment. <u>Id</u>. at 919, citing <u>Cone Corp. v. Hillsborough County</u>, 908 F.2d 908, 916 (11th Cir. 1990).

The court found that the MBE Program of the County could not stand without a proper statistical foundation. <u>Id.</u> at 919. The court addressed whether post-enactment studies done by the County of a statistical foundation could be considered by the court in connection with determining the validity of the County MBE Program. The court held that a municipality must have *some* concrete evidence of discrimination in a particular industry before it may adopt a remedial program. <u>Id.</u> at 920. However, the court said this requirement of *some* evidence does not mean that a program will be automatically struck down if the evidence before the municipality at the time of enactment does not completely fulfill both prongs of the strict scrutiny test. <u>Id.</u> Rather, the court held, the factual predicate for the program should be evaluated based upon all evidence presented to the district court, whether such evidence was adduced before or after enactment of the MBE Program. <u>Id.</u> Therefore, the court adopted a rule that a municipality should have before it some evidence of discrimination before adopting a race-conscious program, while allowing post-adoption evidence to be considered in passing on the constitutionality of the program. <u>Id.</u>

The court, therefore, remanded the case to the district court for determination of whether the consultant studies that were performed after the enactment of the MBE Program could provide an adequate factual justification to establish a "propelling government interest" for King County's adopting the MBE Program. <u>Id</u>. at 922.

The court also found that <u>Croson</u> does not require a showing of active discrimination by the enacting agency, and that passive participation, such as the infusion of tax dollars into a discriminatory industry, suffices. <u>Id.</u> at 922, citing <u>Croson</u>, 488 U.S. at 492. The court pointed out that the Supreme Court in <u>Croson</u> concluded that if the City 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. <u>Id.</u> at 922. The court points out that if the record ultimately supported a finding of systemic discrimination, the County adequately limited its program to those businesses that receive tax dollars, and the program imposed obligations upon only those businesses which voluntarily sought King County tax dollars by contracting with the County. <u>Id.</u>

The court addressed several factors in terms of the narrowly tailored analysis, and found that first, an MBE program should be instituted either after, or in conjunction with, race-neutral means of increasing minority business participation and public contracting. <u>Id</u>. at 922, citing <u>Croson</u>, 488 U.S. at 507. The second characteristic of the narrowly-tailored program, according to the court, is the use of minority utilization goals on a case-by-case basis, rather than upon a system of rigid numerical

quotas. <u>Id</u>. Finally, the court stated that an MBE program must be limited in its effective scope to the boundaries of the enacting jurisdiction. <u>Id</u>.

Among the various narrowly tailored requirements, the court held consideration of race-neutral alternatives is among the most important. <u>Id</u>. at 922. Nevertheless, the court stated that while strict scrutiny requires serious, good faith consideration of race-neutral alternatives, strict scrutiny does not require exhaustion of every possible such alternative. <u>Id</u>. at 923. The court noted that it does not intend a government entity exhaust *every* alternative, however irrational, costly, unreasonable, and unlikely to succeed such alternative might be. <u>Id</u>. Thus, the court required only that a state exhausts race-neutral measures that the state is authorized to enact, and that have a reasonable possibility of being effective. <u>Id</u>. The court noted in this case the County considered alternatives, but determined that they were not available as a matter of law. <u>Id</u>. The County cannot be required to engage in conduct that may be illegal, nor can it be compelled to expend precious tax dollars on projects where potential for success is marginal at best. <u>Id</u>.

The court noted that King County had adopted some race-neutral measures in conjunction with the MBE Program, for example, hosting one or two training sessions for small businesses, covering such topics as doing business with the government, small business management, and accounting techniques. <u>Id</u>. at 923. In addition, the County provided information on assessing Small Business Assistance Programs. <u>Id</u>. The court found that King County fulfilled its burden of considering race-neutral alternative programs. <u>Id</u>.

A second indicator of program's narrowly tailoring is program flexibility. <u>Id</u>. at 924. The court found that an important means of achieving such flexibility is through use of case-by-case utilization goals, rather than rigid numerical quotas or goals. <u>Id</u>. at 924. The court pointed out that King County used a "percentage preference" method, which is not a quota, and while the preference is locked at five percent, such a fixed preference is not unduly rigid in light of the waiver provisions. The court found that a valid MBE Program should include a waiver system that accounts for both the availability of qualified MBEs and whether the qualified MBEs have suffered from the effects of past discrimination by the County or prime contractors. <u>Id</u>. at 924. The court found that King County's program provided waivers in both instances, including where neither minority nor a woman's business is available to provide needed goods or services and where available minority and/or women's businesses have given price quotes that are unreasonably high. <u>Id</u>.

The court also pointed out other attributes of the narrowly tailored and flexible MBE program, including a bidder that does not meet planned goals, may nonetheless be awarded the contract by demonstrating a good faith effort to comply. <u>Id</u>. The actual percentages of required MBE participation are determined on a case-by-case basis. Levels of participation may be reduced if the prescribed levels are not feasible, if qualified MBEs are unavailable, or if MBE price quotes are not competitive. <u>Id</u>.

The court concluded that an MBE program must also be limited in its geographical scope to the boundaries of the enacting jurisdiction. <u>Id</u>. at 925. Here the court held that King County's MBE program fails this third portion of "narrowly tailored" requirement. The court found the definition of "minority business" included in the Program indicated that a minority-owned business may qualify for preferential treatment if the business has been discriminated against in the particular geographical areas in which it operates. The court held this definition as overly broad. <u>Id</u>. at 925. The court held

that the County should ask the question whether a business has been discriminated against in King County. <u>Id</u>. This determination, according to the court, is not an insurmountable burden for the County, as the rule does not require finding specific instances of discriminatory exclusion for each MBE. <u>Id</u>. Rather, if the County successfully proves malignant discrimination within the King County business community, an MBE would be presumptively eligible for relief if it had previously sought to do business in the County. <u>Id</u>.

In other words, if systemic discrimination in the County is shown, then it is fair to presume that an MBE was victimized by the discrimination. <u>Id</u>. at 925. For the presumption to attach to the MBE, however, it must be established that the MBE is, or attempted to become, an active participant in the County's business community. <u>Id</u>. Because King County's program permitted MBE participation even by MBEs that have no prior contact with King County, the program was overbroad to that extent. <u>Id</u>. Therefore, the court reversed the grant of summary judgment to King County on the MBE program on the basis that it was geographically overbroad.

The court considered the gender-specific aspect of the MBE program. The court determined the degree of judicial scrutiny afforded gender-conscious programs was intermediate scrutiny, rather than strict scrutiny. <u>Id</u>. at 930. Under intermediate scrutiny, gender-based classification must serve an important governmental objective, and there must be a direct, substantial relationship between the objective and the means chosen to accomplish the objective. <u>Id</u>. at 931.

In this case, the court concluded, that King County's WBE preference survived a facial challenge. <u>Id.</u> at 932. The court found that King County had a legitimate and important interest in remedying the many disadvantages that confront women business owners and that the means chosen in the program were substantially related to the objective. <u>Id.</u> The court found the record adequately indicated discrimination against women in the King County construction industry, noting the anecdotal evidence including an affidavit of the president of a consulting engineering firm. <u>Id.</u> at 933. Therefore, the court upheld the WBE portion of the MBE program and affirmed the district court's grant of summary judgment to King County for the WBE program.

Recent District Court Decisions

13. <u>H.B. Rowe Corp., Inc. v. W. Lyndo Tippett, North Carolina DOT</u>, et al; 589 F. Supp. 2d 587 (E.D.N.C. 2008), aff'd in part and rev'd in part, F.3d 2010 WL 2871076 (4th Cir. July 22, 2010)

In <u>H.B.</u> Rowe Company v. Tippett, North Carolina Department of Transportation, et al. ("Rowe"), the United States District Court for the Eastern District of North Carolina, Western Division, heard a challenge to the State of North Carolina Minority Business Enterprise and Woman Business Enterprise Program ("MBE Program" or "WBE Program"), which is a State of North Carolina "affirmative action" program administered by the North Carolina DOT ("NCDOT"). The NCDOT MWBE Program challenged in <u>Rowe</u> involves projects funded solely by the State of North Carolina and not funded by the Federal Department of Transportation. 589 F.Supp. 2d 587.

Background. In this case plaintiff, a family-owned road construction business, bid on a NCDOT initiated state-funded project. NCDOT rejected plaintiff's bid in favor of the next low bid that had proposed higher minority participation on the project as part of its bid. According to NCDOT,

plaintiff's bid was rejected because of plaintiff's failure to demonstrate "good faith efforts" to obtain pre-designated levels of minority participation on the project.

As a prime contractor, plaintiff Rowe was obligated under the MWBE Program to either obtain participation of specified levels of minority business enterprise and women business enterprise participation as subcontractors, or to demonstrate good faith efforts to do so. For this particular project, NCDOT had set MBE and WBE subcontractor participation goals of 10 percent and 5 percent, respectively. Plaintiff's bid included 6.6 percent WBE participation, but no MBE participation. The bid was rejected after a review of plaintiff's good faith efforts to obtain MBE participation. The next lowest bidder submitted a bid including 3.3 percent MBE participation and 9.3 percent WBE participation, and although not obtaining a specified level of MBE participation, it was determined to have made good faith efforts to do so. (Order of the District Court, dated March 29, 2007).

North Carolina's MWBE Program "largely mirrors" the Federal Disadvantage Business Enterprise ("DBE") Program, which NCDOT is required to comply with in awarding construction contracts that utilize Federal funds. (589 F.Supp. 2d 587; Order of the District Court, dated September 28, 2007). Like the Federal DBE Program, under North Carolina's MWBE Program, the goals for minority and female participation are aspirational rather than mandatory. <u>Id</u>. An individual target for MBE participation was set for each project. <u>Id</u>.

Historically, NCDOT had engaged in several disparity studies. The most recent study was done in 2004. <u>Id</u>. The 2004 study, which followed the study in 1998, concluded that disparities in utilization of MBEs persist and that a basis remains for continuation of the MWBE Program. The new statute as revised was approved in 2006, which modified the previous MBE statute by eliminating the 10 percent and 5 percent goals and establishing a fixed expiration date of 2009.

Plaintiff filed its complaint in this case in 2003 against the NCDOT and individuals associated with the NCDOT, including the Secretary of NCDOT, W. Lyndo Tippett. In its complaint, plaintiff alleged that the MWBE statute for NCDOT was unconstitutional on its face and as applied. 589 F.Supp. 2d 587.

March 29, 2007 Order of the District Court. The matter came before the district court initially on several motions, including the defendants' Motion to Dismiss or for Partial Summary Judgment, defendants' Motion to Dismiss the Claim for Mootness and plaintiff's Motion for Summary Judgment. The court in its October 2007 Order granted in part and denied in part defendants' Motion to Dismiss or for partial summary judgment; denied defendants' Motion to Dismiss the Claim for Mootness; and dismissed without prejudice plaintiff's Motion for Summary Judgment.

The court held the Eleventh Amendment to the United States Constitution bars plaintiff from obtaining any relief against defendant NCDOT, and from obtaining a retrospective damages award against any of the individual defendants in their official capacities. The court ruled that plaintiff's claims for relief against the NCDOT were barred by the Eleventh Amendment, and the NCDOT was dismissed from the case as a defendant. Plaintiff's claims for interest, actual damages, compensatory damages and punitive damages against the individual defendants sued in their official capacities also was held barred by the Eleventh Amendment and were dismissed. But, the court held that plaintiff was entitled to sue for an injunction to prevent state officers from violating a federal

law, and under the *Ex Parte Young* exception, plaintiff's claim for declaratory and injunctive relief was permitted to go forward as against the individual defendants who were acting in an official capacity with the NCDOT. The court also held that the individual defendants were entitled to qualified immunity, and therefore dismissed plaintiff's claim for money damages against the individual defendants in their individual capacities. Order of the District Court, dated March 29, 2007.

Defendants argued that the recent amendment to the MWBE statute rendered plaintiff's claim for declaratory injunctive relief moot. The new MWBE statute adopted in 2006, according to the court, does away with many of the alleged shortcomings argued by the plaintiff in this lawsuit. The court found the amended statute has a sunset date in 2009; specific aspirational participation goals by women and minorities are eliminated; defines "minority" as including only those racial groups which disparity studies identify as subject to underutilization in state road construction contracts; explicitly references the findings of the 2004 Disparity Study and requires similar studies to be conducted at least once every five years; and directs NCDOT to enact regulations targeting discrimination identified in the 2004 and future studies.

The court held, however, that the 2004 Disparity Study and amended MWBE statute do not remedy the primary problem which the plaintiff complained of: the use of remedial race- and gender- based preferences allegedly without valid evidence of past racial and gender discrimination. In that sense, the court held the amended MWBE statute continued to present a live case or controversy, and accordingly denied the defendants' Motion to Dismiss Claim for Mootness as to plaintiff's suit for prospective injunctive relief. Order of the District Court, dated March 29, 2007.

The court also held that since there had been no analysis of the MWBE statute apart from the briefs regarding mootness, plaintiff's pending Motion for Summary Judgment was dismissed without prejudice. Order of the District Court, dated March 29, 2007.

September 28, 2007 Order of the District Court. On September 28, 2007, the district court issued a new order in which it denied both the plaintiff's and the defendants' Motions for Summary Judgment. Plaintiff claimed that the 2004 Disparity Study is the sole basis of the MWBE statute, that the study is flawed, and therefore it does not satisfy the first prong of strict scrutiny review. Plaintiff also argued that the 2004 study tends to prove non-discrimination in the case of women; and finally the MWBE Program fails the second prong of strict scrutiny review in that it is not narrowly tailored.

The court found summary judgment was inappropriate for either party and that there are genuine issues of material fact for trial. The first and foremost issue of material fact, according to the court, was the adequacy of the 2004 Disparity Study as used to justify the MWBE Program. Therefore, because the court found there was a genuine issue of material fact regarding the 2004 Study, summary judgment was denied on this issue.

The court also held there was confusion as to the basis of the MWBE Program, and whether it was based solely on the 2004 Study or also on the 1993 and 1998 Disparity Studies. Therefore, the court held a genuine issue of material fact existed on this issue and denied summary judgment. Order of the District Court, dated September 28, 2007.

December 9, 2008 Order of the District Court (589 F.Supp. 2d 587). The district court on December 9, 2008, after a bench trial, issued an Order that found as a fact and concluded as a matter

of law that plaintiff failed to satisfy its burden of proof that the North Carolina Minority and Women's Business Enterprise program, enacted by the state legislature to affect the awarding of contracts and subcontracts in state highway construction, violated the United States Constitution.

Plaintiff, in its complaint filed against the NCDOT alleged that N.C. Gen. St. § 136-28.4 is unconstitutional on its face and as applied, and that the NCDOT while administering the MWBE program violated plaintiff's rights under the federal law and the United States Constitution. Plaintiff requested a declaratory judgment that the MWBE program is invalid and sought actual and punitive damages.

As a prime contractor, plaintiff was obligated under the MWBE program to either obtain participation of specified levels of MBE and WBE subcontractors, or to demonstrate that good faith efforts were made to do so. Following a review of plaintiff's good faith efforts to obtain minority participation on the particular contract that was the subject of plaintiff's bid, the bid was rejected. Plaintiff's bid was rejected in favor of the next lowest bid, which had proposed higher minority participation on the project as part of its bid. According to NCDOT, plaintiff's bid was rejected because of plaintiff's failure to demonstrate good faith efforts to obtain pre-designated levels of minority participation on the project. 589 F.Supp. 2d 587.

North Carolina's MWBE program. The MWBE program was implemented following amendments to N.C. Gen. Stat. §136-28.4. Pursuant to the directives of the statute, the NCDOT promulgated regulations governing administration of the MWBE program. See N.C. Admin. Code tit. 19A, § 2D.1101, et seq. The regulations had been amended several times and provide that NCDOT shall ensure that MBEs and WBEs have the maximum opportunity to participate in the performance of contracts financed with non-Federal funds. N.C. Admin. Code Tit. 19A § 2D.1101.

North Carolina's MWBE program, which affected only highway bids and contracts funded solely with state money, according to the district court, largely mirrored the Federal DBE Program which NCDOT is required to comply with in awarding construction contracts that utilize federal funds. 589 F.Supp. 2d 587. Like the Federal DBE Program, under North Carolina's MWBE program, the targets for minority and female participation were aspirational rather than mandatory, and individual targets for disadvantaged business participation were set for each individual project. N.C. Admin. Code tit. 19A § 2D.1108. In determining what level of MBE and WBE participation was appropriate for each project, NCDOT would take into account "the approximate dollar value of the contract, the geographical location of the proposed work, a number of the eligible funds in the geographical area, and the anticipated value of the items of work to be included in the contract." Id. NCDOT would also consider "the annual goals mandated by Congress and the North Carolina General Assembly." Id.

A firm could be certified as a MBE or WBE by showing NCDOT that it is "owner controlled by one or more socially and economically disadvantaged individuals." NC Admin. Code tit. 1980, § 2D.1102.

The district court stated the MWBE program did not directly discriminate in favor of minority and women contractors, but rather "encouraged prime contractors to favor MBEs and WBEs in subcontracting before submitting bids to NCDOT." 589 F.Supp. 2d 587. In determining whether the lowest bidder is "responsible," NCDOT would consider whether the bidder obtained the level of

certified MBE and WBE participation previously specified in the NCDOT project proposal. If not, NCDOT would consider whether the bidder made good faith efforts to solicit MBE and WBE participation. N.C. Admin. Code tit. 19A§ 2D.1108.

There were multiple studies produced and presented to the North Carolina General Assembly in the years 1993, 1998 and 2004. The 1998 and 2004 studies concluded that disparities in the utilization of minority and women contractors persist, and that there remains a basis for continuation of the MWBE program. The MWBE program as amended after the 2004 study includes provisions that eliminated the 10 percent and 5 percent goals and instead replaced them with contract-specific participation goals created by NCDOT; established a sunset provision that has the statute expiring on August 31, 2009; and provides reliance on a disparity study produced in 2004.

The MWBE program, as it stood at the time of this decision, provides that NCDOT "dictates to prime contractors the express goal of MBE and WBE subcontractors to be used on a given project. However, instead of the state hiring the MBE and WBE subcontractors itself, the NCDOT makes the prime contractor solely responsible for vetting and hiring these subcontractors. If a prime contractor fails to hire the goal amount, it must submit efforts of 'good faith' attempts to do so." 589 F.Supp. 2d 587.

Compelling interest. The district court held that NCDOT established a compelling governmental interest to have the MWBE program. The court noted that the United States Supreme Court in Croson made clear that a state legislature has a compelling interest in eradicating and remedying private discrimination in the private subcontracting inherent in the letting of road construction contracts. 589 F.Supp. 2d 587, citing Croson, 488 U.S. at 492. The district court found that the North Carolina Legislature established it relied upon a strong basis of evidence in concluding that prior race discrimination in North Carolina's road construction industry existed so as to require remedial action.

The court held that the 2004 Disparity Study demonstrated the existence of previous discrimination in the specific industry and locality at issue. The court stated that disparity ratios provided for in the 2004 Disparity Study highlighted the underutilization of MBEs by prime contractors bidding on state funded highway projects. In addition, the court found that evidence relied upon by the legislature demonstrated a dramatic decline in the utilization of MBEs during the program's suspension in 1991. The court also found that anecdotal support relied upon by the legislature confirmed and reinforced the general data demonstrating the underutilization of MBEs. The court held that the NCDOT established that, "based upon a clear and strong inference raised by this Study, they concluded minority contractors suffer from the lingering effects of racial discrimination." 589 F.Supp. 2d 587.

With regard to WBEs, the court applied a different standard of review. The court held the legislative scheme as it relates to MWBEs must serve an important governmental interest and must be substantially related to the achievement of those objectives. The court found that NCDOT established an important governmental interest. The 2004 Disparity Study provided that the average contracts awarded WBEs are significantly smaller than those awarded non-WBEs. The court held that NCDOT established based upon a clear and strong inference raised by the Study, women contractors suffer from past gender discrimination in the road construction industry.

Narrowly tailored. The district court noted that the Fourth Circuit of Appeals lists a number of factors to consider in analyzing a statute for narrow tailoring: (1) the necessity of the policy and the efficacy of alternative race neutral policies; (2) the planned duration of the policy; (3) the relationship between the numerical goal and the percentage of minority group members in the relevant population; (4) the flexibility of the policy, including the provision of waivers if the goal cannot be met; and (5) the burden of the policy on innocent third parties. 589 F.Supp. 2d 587, quoting <u>Belk v. Charlotte-Mecklenburg Board of Education</u>, 269 F.3d 305, 344 (4th Cir. 2001).

The district court held that the legislative scheme in N.C. Gen. Stat. § 136-28.4 is narrowly tailored to remedy private discrimination of minorities and women in the private subcontracting inherent in the letting of road construction contracts. The district court's analysis focused on narrowly tailoring factors (2) and (4) above, namely the duration of the policy and the flexibility of the policy. With respect to the former, the court held the legislative scheme provides the program be reviewed at least every five years to revisit the issue of utilization of MWBEs in the road construction industry. N.C. Gen. Stat. §136-28.4(b). Further, the legislative scheme includes a sunset provision so that the program will expire on August 31, 2009, unless renewed by an act of the legislature. <u>Id</u>. at § 136-28.4(e). The court held these provisions ensured the legislative scheme last no longer than necessary.

The court also found that the legislative scheme enacted by the North Carolina legislature provides flexibility insofar as the participation goals for a given contract or determined on a project by project basis. § 136-28.4(b)(1). Additionally, the court found the legislative scheme in question is not overbroad because the statute applies only to "those racial or ethnicity classifications identified by a study conducted in accordance with this section that had been subjected to discrimination in a relevant marketplace and that had been adversely affected in their ability to obtain contracts with the Department." § 136-28.4(c)(2). The court found that plaintiff failed to provide any evidence that indicates minorities from non-relevant racial groups had been awarded contracts as a result of the statute.

The court held that the legislative scheme is narrowly tailored to remedy private discrimination of minorities and women in the private subcontracting inherent in the letting of road construction contracts, and therefore found that § 136-28.4 is constitutional.

The decision of the district court was appealed to the United States Court of Appeals for the Fourth Circuit. The Fourth Circuit affirmed in part and reversed in part the decision of the District Court. H. B. Rowe Co., Inc. v. W. Lyndo Tippett, NCDOT, et al, F.3d 2010 WL 2871076 (4th Cir. July 22, 2010) discussed above.

14. Thomas v. City of Saint Paul, 526 F. Supp. 2d 959 (D. Minn 2007), affirmed, 321 Fed. Appx. 541, 2009 WL 777932 (8th Cir. March 26, 2009) (unpublished opinion), cert. denied, ___S.Ct. _____, 2009 WL 2496325 (U.S. October 13, 2009).

In <u>Thomas v. City of Saint Paul</u>, the plaintiffs are African American business owners who brought this lawsuit claiming that the City of Saint Paul, Minnesota discriminated against them in awarding publicly-funded contracts. The City moved for summary judgment, which the United States District Court granted and issued an order dismissing the plaintiff's lawsuit in December 2007.

The background of the case involves the adoption by the City of Saint Paul of a Vendor Outreach Program (the "VOP") that was designed to assist minority and other small business owners in competing for City contracts. Plaintiffs were VOP-certified minority business owners. Plaintiffs contended that the City engaged in racially discriminatory illegal conduct in awarding City contracts for publicly-funded projects. Plaintiff Thomas claimed that the City denied him opportunities to work on projects because of his race arguing that the City failed to invite him to bid on certain projects, the City failed to award him contracts and the fact independent developers had not contracted with his company. 526 F. Supp. 2d at 962. The City contended that Thomas was provided opportunities to bid for the City's work.

Plaintiff Brian Conover owned a trucking firm, and he claimed that none of his bids as a subcontractor, on 22 different projects to various independent developers were accepted. 526 F. Supp. 2d at 962. The court found that after years of discovery, plaintiff Conover offered no admissible evidence to support his claim, had not identified the subcontractors whose bids were accepted, and did not offer any comparison showing the accepted bid and the bid he submitted. <u>Id</u>. Plaintiff Conover also complained that he received bidding invitations only a few days before a bid was due, which did not allow him adequate time to prepare a competitive bid. <u>Id</u>. The court found, however, he failed to identify any particular project for which he had only a single day of bid, and did not identify any similarly situated person of any race who was afforded a longer period of time in which to submit a bid. <u>Id</u>. at 963. Plaintiff Newell claimed he submitted numerous bids on the City's projects all of which were rejected. <u>Id</u>. The court found, however, that he provided no specifics about why he did not receive the work. <u>Id</u>.

The VOP. Under the VOP, the City sets annual bench marks or levels of participation for the targeted minorities groups. <u>Id.</u> at 963. The VOP prohibits quotas and imposes various "good faith" requirements on prime contractors who bid for City projects. <u>Id.</u> at 964. In particular, the VOP requires that when a prime contractor rejects a bid from a VOP-certified business, the contractor must give the City its basis for the rejection, and evidence that the rejection was justified. <u>Id.</u> The VOP further imposes obligations on the City with respect to vendor contracts. <u>Id.</u> The court found the City must seek where possible and lawful to award a portion of vendor contracts to VOP-certified businesses. <u>Id.</u> The City contract manager must solicit these bids by phone, advertisement in a local newspaper or other means. Where applicable, the contract manager may assist interested VOP participants in obtaining bonds, lines of credit or insurance required to perform under the contract. <u>Id.</u> The VOP ordinance provides that when the contract manager engages in one or more possible outreach efforts, he or she is in compliance with the ordinance. <u>Id.</u>

Analysis and Order of the Court. The district court found that the City is entitled to summary judgment because plaintiffs lack standing to bring these claims and that no genuine issue of material fact remains. <u>Id.</u> at 965. The court held that the plaintiffs had no standing to challenge the VOP because they failed to show they were deprived of an opportunity to compete, or that their inability to obtain any contract resulted from an act of discrimination. <u>Id.</u> The court found they failed to show any instance in which their race was a determinant in the denial of any contract. <u>Id.</u> at 966. As a result, the court held plaintiffs failed to demonstrate the City engaged in discriminatory conduct or policy which prevented plaintiffs from competing. <u>Id.</u> at 965-966.

The court held that in the absence of any showing of intentional discrimination based on race, the mere fact the City did not award any contracts to plaintiffs does not furnish that causal nexus necessary to establish standing. <u>Id</u>. at 966. The court held the law does not require the City to voluntarily adopt "aggressive race-based affirmative action programs" in order to award specific groups publicly-funded contracts. <u>Id</u>. at 966. The court found that plaintiffs had failed to show a violation of the VOP ordinance, or any illegal policy or action on the part of the City. <u>Id</u>.

The court stated that the plaintiffs must identify a discriminatory policy in effect. <u>Id</u>. at 966. The court noted, for example, even assuming the City failed to give plaintiffs more than one day's notice to enter a bid, such a failure is not, per se, illegal. <u>Id</u>. The court found the plaintiffs offered no evidence that anyone else of any other race received an earlier notice, or that he was given this allegedly tardy notice as a result of his race. <u>Id</u>.

The court concluded that even if plaintiffs may not have been hired as a subcontractor to work for prime contractors receiving City contracts, these were independent developers and the City is not required to defend the alleged bad acts of others. <u>Id</u>. Therefore, the court held plaintiffs had no standing to challenge the VOP. <u>Id</u>. at 966.

Plaintiffs claims. The court found that even assuming plaintiffs possessed standing, they failed to establish facts which demonstrated a need for a trial, primarily because each theory of recovery is viable only if the City "intentionally" treated plaintiffs unfavorably because of their race. <u>Id</u>. at 967. The court held to establish a prima facie violation of the equal protection clause, there must be state action. <u>Id</u>. Plaintiffs must offer facts and evidence that constitute proof of "racially discriminatory intent or purpose." <u>Id</u>. at 967. Here, the court found that plaintiff failed to allege any single instance showing the City "intentionally" rejected VOP bids based on their race. <u>Id</u>.

The court also found that plaintiffs offered no evidence of a specific time when any one of them submitted the lowest bid for a contract or a subcontract, or showed any case where their bids were rejected on the basis of race. <u>Id</u>. The court held the alleged failure to place minority contractors in a preferred position, without more, is insufficient to support a finding that the City failed to treat them equally based upon their race. <u>Id</u>.

The City rejected the plaintiffs claims of discrimination because the plaintiffs did not establish by evidence that the City "intentionally" rejected their bid due to race or that the City "intentionally" discriminated against these plaintiffs. Id. at 967-968. The court held that the plaintiffs did not establish a single instance showing the City deprived them of their rights, and the plaintiffs did not produce evidence of a "discriminatory motive." Id. at 968. The court concluded that plaintiffs had failed to show that the City's actions were "racially motivated." Id.

The Eight Circuit Court of Appeals recently affirmed the ruling of the district court. Thomas v. City of Saint Paul, 2009 WL 777932 (8th Cir. March 26, 2009)(unpublished opinion). The Eighth Circuit affirmed based on the decision of the district court and finding no reversible error.

15. <u>Thompson Building Wrecking Co. v. Augusta, Georgia</u>, No. 1:07CV019, 2007 WL 926153 (S.D. Ga. Mar. 14, 2007)(Slip. Op.)

This case considered the validity of the City of Augusta's local minority disadvantaged business enterprise ("DBE") program. The district court enjoined the City from favoring any contract bid on the basis of racial classification and based its decision principally upon the outdated and insufficient data proffered by the City in support of its program. 2007 WL 926153 at *9-10.

The City of Augusta enacted a local DBE program based upon the results of a disparity study completed in 1994. The disparity study examined the disparity in socioeconomic status among races, compared black-owned businesses in Augusta with those in other regions and those owned by other racial groups, examined "Georgia's racist history" in contracting and procurement, and examined certain data related to Augusta's contracting and procurement. <u>Id.</u> at *1-4. The plaintiff contractors and subcontractors challenged the constitutionality of the DBE program and sought to extend a temporary injunction enjoining the City's implementation of racial preferences in public bidding and procurement.

The City defended the DBE program arguing that is did not utilize racial classifications because it only required vendors to make a "good faith effort" to ensure DBE participation. <u>Id.</u> at *6. The court rejected this argument noting that bidders were required to submit a "Proposed DBE Participation" form and that bids containing DBE participation were treated more favorably than those bids without DBE participation. The court stated: "Because a person's business can qualify for the favorable treatment based on that person's race, while a similarly situated person of another race would not qualify, the program contains a racial classification." <u>Id.</u>

The court noted that the DBE program harmed subcontractors in two ways: first, because prime contractors will discriminate between DBE and non-DBE subcontractors and a bid with a DBE subcontractor would be treated more favorably; and second, because the City would favor a bid containing DBE participation over an equal or even superior bid containing no DBE participation. Id.

The court applied the strict scrutiny standard set forth in <u>Croson</u> and <u>Engineering Contractors</u> <u>Association</u> to determine whether the City had a compelling interest for its program and whether the program was narrowly tailored to that end. The court noted that pursuant to <u>Croson</u>, the City would have a compelling interest in assuring that tax dollars would not perpetuate private prejudice. But, the court found (citing to <u>Croson</u>), that a state or local government must identify that discrimination, "public or private, with some specificity before they may use race-conscious relief." The court cited the Eleventh Circuit's position that "'gross statistical disparities' between the proportion of minorities hired by the public employer and the proportion of minorities hired by the public employer and the proportion of minorities hired by the analysis.

The court determined that while the City's disparity study showed some statistical disparities buttressed by anecdotal evidence, the study suffered from multiple issues. <u>Id.</u> at *7-8. Specifically, the

court found that those portions of the study examining discrimination outside the area of subcontracting (e.g., socioeconomic status of racial groups in the Augusta area) were irrelevant for purposes of showing a compelling interest. The court also cited the failure of the study to differentiate between different minority races as well as the improper aggregation of race- and gender-based discrimination referred to as Simpson's Paradox.

The court assumed for purposes of its analysis that the City could show a compelling interest but concluded that the program was not narrowly tailored and thus could not satisfy strict scrutiny. The court found that it need look no further beyond the fact of the thirteen-year duration of the program absent further investigation, and the absence of a sunset or expiration provision, to conclude that the DBE program was not narrowly tailored. <u>Id.</u> at *8. Noting that affirmative action is permitted only sparingly, the court found: "[i]t would be impossible for Augusta to argue that, 13 years after last studying the issue, racial discrimination is so rampant in the Augusta contracting industry that the City must affirmatively act to avoid being complicit." <u>Id.</u> The court held in conclusion, that the plaintiffs were "substantially likely to succeed in proving that, when the City requests bids with minority participation and in fact favors bids with such, the plaintiffs will suffer racial discrimination in violation of the Equal Protection Clause." <u>Id.</u> at *9.

In a subsequent Order dated September 5, 2007, the court denied the City's motion to continue plaintiff's Motion for Summary Judgment, denied the City's Rule 12(b)(6) motion to dismiss, and stayed the action for 30 days pending mediation between the parties. Importantly, in this Order, the court reiterated that the female- and locally-owned business components of the program (challenged in plaintiff's Motion for Summary Judgment) would be subject to intermediate scrutiny and rational basis scrutiny, respectively. The court also reiterated its rejection of the City's challenge to the plaintiffs' standing. The court noted that under <u>Adarand</u>, preventing a contractor from competing on an equal footing satisfies the particularized injury prong of standing. And showing that the contractor will sometime in the future bid on a City contract "that offers financial incentives to a prime contractor for hiring disadvantaged subcontractors" satisfies the second requirement that the particularized injury be actual or imminent. Accordingly, the court concluded that the plaintiffs have standing to pursue this action.

16. <u>Hershell Gill Consulting Engineers, Inc. v. Miami-Dade County</u>, 333 F. Supp. 2d 1305 (S.D. Fla. 2004)

The decision in Hershell Gill Consulting Engineers, Inc. v. Miami-Dade County, is significant to the disparity study because it applied and followed the Engineering Contractors Association decision in the context of contracting and procurement for goods and services (including architect and engineer services). Many of the other cases focused on construction, and thus Hershell Gill is instructive as to the analysis relating to architect and engineering services. The decision in Hershell Gill also involved a district court in the Eleventh Circuit imposing compensatory and punitive damages upon individual County Commissioners due to the district court's finding of their willful failure to abrogate an unconstitutional MBE/WBE Program. In addition, the case is noteworthy because the district court refused to follow the 2003 Tenth Circuit Court of Appeals decision in Concrete Works of Colorado, Inc. v. City and County of Denver, 321 .3d 950 (10th Cir. 2003). See discussion, infra.

Six years after the decision in <u>Engineering Contractors Association</u>, two white male-owned engineering firms (the "plaintiffs") brought suit against Engineering Contractors Association (the

"County"), the former County Manager, and various current County Commissioners (the "Commissioners") in their official and personal capacities (collectively the "defendants"), seeking to enjoin the same "participation goals" in the same MWBE program deemed to violate the Fourteenth Amendment in the earlier case. 333 F. Supp. 1305, 1310 (S.D. Fla. 2004). After the Eleventh Circuit's decision in Engineering Contractors Association striking down the MWBE programs as applied to construction contracts, the County enacted a Community Small Business Enterprise (CSBE) program for construction contracts, "but continued to apply racial, ethnic, and gender criteria to its purchases of goods and services in other areas, including its procurement of A&E services." Id. at 1311.

The plaintiffs brought suit challenging the Black Business Enterprise (BBE) program, the Hispanic Business Enterprise (HBE) program, and the Women Business Enterprise (WBE) program (collectively "MBE/WBE"). <u>Id.</u> The MBE/WBE programs applied to A&E contracts in excess of \$25,000. <u>Id.</u> at 1312. The County established five "contract measures" to reach the participation goals: (1) set asides, (2) subcontractor goals, (3) project goals, (4) bid preferences, and (5) selection factors. <u>Id.</u> Once a contract was identified as covered by a participation goal, a review committee would determine whether a contract measure should be utilized. <u>Id.</u> The County was required to review the efficacy of the MBE/WBE programs annually, and reevaluated the continuing viability of the MBE/WBE programs every five years. <u>Id.</u> at 1313. However, the district court found "the participation goals for the three MBE/WBE programs challenged ... remained unchanged since 1994." <u>Id.</u>

In 1998, counsel for plaintiffs contacted the County Commissioners requesting the discontinuation of contract measures on A&E contracts. <u>Id.</u> at 1314. Upon request of the Commissioners, the county manager then made two reports (an original and a follow-up) measuring parity in terms of dollars awarded and dollars paid in the areas of A&E for blacks, Hispanics, and women, and concluded both times that the "County has reached parity for black, Hispanic, and Women-owned firms in the areas of [A&E] services." The final report further stated "Based on all the analyses that have been performed, the County does not have a basis for the establishment of participation goals which would allow staff to apply contract measures." <u>Id.</u> at 1315. The district court also found that the Commissioners were informed that "there was even less evidence to support [the MBE/WBE] programs as applied to architects and engineers then there was in contract construction." <u>Id.</u> Nonetheless, the Commissioners voted to continue the MBE/WBE participation goals at their previous levels. <u>Id.</u>

In May of 2000 (18 months after the lawsuit was filed), the County commissioned Dr. Manuel J. Carvajal, an econometrician, to study architects and engineers in the county. His final report had four parts:

(1) data identification and collection of methodology for displaying the research results; (2) presentation and discussion of tables pertaining to architecture, civil engineering, structural engineering, and awards of contracts in those areas; (3) analysis of the structure and empirical estimates of various sets of regression equations, the calculation of corresponding indices, and an assessment of their importance; and (4) a conclusion that there is discrimination against women and Hispanics — but not against blacks — in the fields of architecture and engineering.

<u>Id.</u> The district court issued a preliminary injunction enjoining the use of the MBE/WBE programs for A&E contracts, pending the United States Supreme Court decisions in <u>Gratz v. Bollinger</u>, 539 U.S. 244 (2003) and <u>Grutter v. Bollinger</u>, 539 U.S. 306 (2003). <u>Id.</u> at 1316.

The court considered whether the MBE/WBE programs were violative of Title VII of the Civil Rights Act, and whether the County and the County Commissioners were liable for compensatory and punitive damages.

The district court found that the Supreme Court decisions in <u>Gratz</u> and <u>Grutter</u> did not alter the constitutional analysis as set forth in <u>Adarand</u> and <u>Croson</u>. <u>Id.</u> at 1317. Accordingly, the race- and ethnicity-based classifications were subject to strict scrutiny, meaning the County must present "a strong basis of evidence" indicating the MBE/WBE program was necessary and that it was narrowly tailored to its purported purpose. <u>Id.</u> at 1316. The gender-based classifications were subject to intermediate scrutiny, requiring the County to show the "gender-based classification serves an important governmental objective, and that it is substantially related to the achievement of that objective." <u>Id.</u> at 1317 (internal citations omitted). The court found that the proponent of a gender-based affirmative action program must present "sufficient probative evidence" of discrimination. <u>Id.</u> (internal citations omitted). The court found that under the intermediate scrutiny analysis, the County must (1) demonstrate past discrimination against women but not necessarily at the hands of the County, and (2) that the gender-conscious affirmative action program need not be used only as a "last resort." <u>Id.</u>

The County presented both statistical and anecdotal evidence. <u>Id.</u> at 1318. The statistical evidence consisted of Dr. Carvajal's report, most of which consisted of "post-enactment" evidence. <u>Id.</u> Dr. Carvajal's analysis sought to discover the existence of racial, ethnic and gender disparities in the A&E industry, and then to determine whether any such disparities could be attributed to discrimination. <u>Id.</u> The study used four data sets: three were designed to establish the marketplace availability of firms (architecture, structural engineering, and civil engineering), and the fourth focused on awards issued by the County. <u>Id.</u> Dr. Carvajal used the phone book, a list compiled by infoUSA, and a list of firms registered for technical certification with the County's Department of Public Works to compile a list of the "universe" of firms competing in the market. <u>Id.</u> For the architectural firms only, he also used a list of firms that had been issued an architecture professional license. <u>Id.</u>

Dr. Carvajal then conducted a phone survey of the identified firms. Based on his data, Dr. Carvajal concluded that disparities existed between the percentage of A&E firms owned by blacks, Hispanics, and women, and the percentage of annual business they received. <u>Id.</u> Dr. Carvajal conducted regression analyses "in order to determine the effect a firm owner's gender or race had on certain dependent variables." <u>Id.</u> Dr. Carvajal used the firm's annual volume of business as a dependent variable and determined the disparities were due in each case to the firm's gender and/or ethnic classification. <u>Id.</u> at 1320. He also performed variants to the equations including: (1) using certification rather than survey data for the experience / capacity indicators, (2) with the outliers deleted, (3) with publicly-owned firms deleted, (4) with the dummy variables reversed, and (5) using only currently certified firms." <u>Id.</u> Dr. Carvajal's results remained substantially unchanged. <u>Id.</u>

Based on his analysis of the marketplace data, Dr. Carvajal concluded that the "gross statistical disparities" in the annual business volume for Hispanic- and women-owned firms could be attributed to discrimination; he "did not find sufficient evidence of discrimination against blacks." <u>Id.</u>

The court held that Dr. Carvajal's study constituted neither a "strong basis in evidence" of discrimination necessary to justify race- and ethnicity-conscious measures, nor did it constitute "sufficient probative evidence" necessary to justify the gender-conscious measures. <u>Id.</u> The court made an initial finding that no disparity existed to indicate underutilization of MBE/WBEs in the award of A&E contracts by the County, nor was there underutilization of MBE/WBEs in the contracts they were awarded. <u>Id.</u> The court found that an analysis of the award data indicated, "[i]f anything, the data indicates an overutilization of minority-owned firms by the County in relation to their numbers in the marketplace." <u>Id.</u>

With respect to the marketplace data, the County conceded that there was insufficient evidence of discrimination against blacks to support the BBE program. <u>Id.</u> at 1321. With respect to the marketplace data for Hispanics and women, the court found it "unreliable and inaccurate" for three reasons: (1) the data failed to properly measure the geographic market, (2) the data failed to properly measure the product market, and (3) the marketplace data survey was unreliable. <u>Id.</u> at 1321-25.

The court ruled that it would not follow the Tenth Circuit decision of Concrete Works of Colorado, Inc. v. City and County of Denver, 321 F.3d 950 (10th Cir. 2003), as the burden of proof enunciated by the Tenth Circuit conflicts with that of the Eleventh Circuit, and the "Tenth Circuit's decision is flawed for the reasons articulated by Justice Scalia in his dissent from the denial of certiorari." Id. at 1325 (internal citations omitted).

The defendant intervenors presented anecdotal evidence pertaining only to discrimination against women in the County's A&E industry. <u>Id.</u> The anecdotal evidence consisted of the testimony of three A&E professional women, "nearly all" of which was related to discrimination in the award of County contracts. <u>Id.</u> at 1326. However, the district court found that the anecdotal evidence contradicted Dr. Carvajal's study indicating that no disparity existed with respect to the award of County A&E contracts. <u>Id.</u>

The court quoted the Eleventh Circuit in <u>Engineering Contractors Association</u> for the proposition "that only in the rare case will anecdotal evidence suffice standing alone." <u>Id.</u> (internal citations omitted). The court held that "[t]his is not one of those rare cases." The district court concluded that the statistical evidence was "unreliable and fail[ed] to establish the existence of discrimination," and the anecdotal evidence was insufficient as it did not even reach the level of anecdotal evidence in <u>Engineering Contractors Association</u> where the County employees themselves testified. <u>Id.</u>

The court made an initial finding that a number of minority groups provided preferential treatment were in fact majorities in the County in terms of population, voting capacity, and representation on the County Commission. <u>Id.</u> at 1326-1329. For purposes only of conducting the strict scrutiny analysis, the court then assumed that Dr. Carvajal's report demonstrated discrimination against Hispanics (note the County had conceded it had insufficient evidence of discrimination against blacks) and sought to determine whether the HBE program was narrowly tailored to remedying that discrimination. <u>Id.</u> at 1330. However, the court found that because the study failed to "identify who is engaging in the discrimination, what form the discrimination might take, at what stage in the process it is taking place, or how the discrimination is accomplished ... it is virtually impossible to narrowly tailor any remedy, and the HBE program fails on this fact alone." <u>Id.</u>

The court found that even after the County Managers informed the Commissioners that the County had reached parity in the A&E industry, the Commissioners declined to enact a CSBE ordinance, a race-neutral measure utilized in the construction industry after Engineering Contractors Association. Id. Instead, the Commissioners voted to continue the HBE program. Id. The court held that the County's failure to even explore a program similar to the CSBE ordinance indicated that the HBE program was not narrowly tailored. Id. at 1331.

The court also found that the County enacted a broad anti-discrimination ordinance imposing harsh penalties for a violation thereof. <u>Id.</u> However, "not a single witness at trial knew of any instance of a complaint being brought under this ordinance concerning the A&E industry," leading the court to conclude that the ordinance was either not being enforced, or no discrimination existed. <u>Id.</u> Under either scenario, the HBE program could not be narrowly tailored. <u>Id.</u>

The court found the waiver provisions in the HBE program inflexible in practice. <u>Id.</u> Additionally, the court found the County had failed to comply with the provisions in the HBE program requiring adjustment of participation goals based on annual studies, because the County had not in fact conducted annual studies for several years. <u>Id.</u> The court found this even "more problematic" because the HBE program did not have a built-in durational limit, and thus blatantly violated Supreme Court jurisprudence requiring that racial and ethnic preferences "must be limited in time." <u>Id.</u> at 1332, citing <u>Grutter</u>, 123 S. Ct. at 2346. For the foregoing reasons, the court concluded the HBE program was not narrowly tailored. <u>Id.</u> at 1332.

With respect to the WBE program, the court found that "the failure of the County to identify who is discriminating and where in the process the discrimination is taking place indicates (though not conclusively) that the WBE program is not substantially related to eliminating that discrimination." Id. at 1333. The court found that the existence of the anti-discrimination ordinance, the refusal to enact a small business enterprise ordinance, and the inflexibility in setting the participation goals rendered the WBE unable to satisfy the substantial relationship test. Id.

The court held that the County was liable for any compensatory damages. <u>Id.</u> at 1333-34. The court held that the Commissioners had absolute immunity for their legislative actions; however, they were not entitled to qualified immunity for their actions in voting to apply the race-, ethnicity-, and gender-conscious measures of the MBE/WBE programs if their actions violated "clearly established statutory or constitutional rights of which a reasonable person would have known ... Accordingly, the question is whether the state of the law at the time the Commissioners voted to apply [race-, ethnicity-, and gender-conscious measures] gave them 'fair warning' that their actions were unconstitutional. " <u>Id.</u> at 1335-36 (internal citations omitted).

The court held that the Commissioners were not entitled to qualified immunity because they "had before them at least three cases that gave them fair warning that their application of the MBE/WBE programs ... were unconstitutional: Croson, Adarand and [Engineering Contractors Association]." Id. at 1137. The court found that the Commissioners voted to apply the contract measures after the Supreme Court decided both Croson and Adarand. Id. Moreover, the Eleventh Circuit had already struck down the construction provisions of the same MBE/WBE programs. Id. Thus, the case law was "clearly established" and gave the Commissioners fair warning that the MBE/WBE programs were unconstitutional. Id.

The court also found the Commissioners had specific information from the County Manager and other internal studies indicating the problems with the MBE/WBE programs and indicating that parity had been achieved. <u>Id.</u> at 1338. Additionally, the Commissioners did not conduct the annual studies mandated by the MBE/WBE ordinance itself. <u>Id.</u> For all the foregoing reasons, the court held the Commissioners were subject to individual liability for any compensatory and punitive damages.

The district court enjoined the County, the Commissioners, and the County Manager from using, or requiring the use of, gender, racial, or ethnic criteria in deciding (1) whether a response to an RFP submitted for A&E work is responsive, (2) whether such a response will be considered, and (3) whether a contract will be awarded to a consultant submitting such a response. The court awarded the plaintiffs \$100 each in nominal damages and reasonable attorneys' fees and costs, for which it held the County and the Commissioners jointly and severally liable.

17. Florida A.G.C. Council, Inc. v. State of Florida, 303 F. Supp. 2d 1307 (N.D. Fla. 2004)

This case is instructive to the disparity study as to the manner in which district courts within the Eleventh Circuit are interpreting and applying Engineering Contractors Association. It is also instructive in terms of the type of legislation to be considered by the local and state governments as to what the courts consider to be a "race-conscious" program and/or legislation, as well as to the significance of the implementation of the legislation to the analysis.

The plaintiffs, A.G.C. Council, Inc. and the South Florida Chapter of the Associated General Contractors brought this case challenging the constitutionality of certain provisions of a Florida statute (Section 287.09451, *et seq.*). The plaintiffs contended that the statute violated the Equal Protection Clause of the Fourteenth Amendment by instituting race- and gender-conscious "preferences" in order to increase the numeric representation of minority business enterprises ("MBEs") in certain industries.

According to the court, the Florida Statute enacted race-conscious and gender-conscious remedial programs to ensure minority participation in state contracts for the purchase of commodities and in construction contracts. The State created the Office of Supplier Diversity ("OSD") to assist MBEs to become suppliers of commodities, services and construction to the state government. The OSD had certain responsibilities, including adopting rules meant to assess whether state agencies have made good faith efforts to solicit business from MBEs, and to monitor whether contractors have made good faith efforts to comply with the objective of greater overall MBE participation.

The statute enumerated measures that contractors should undertake, such as minority-centered recruitment in advertising as a means of advancing the statute's purpose. The statute provided that each State agency is "encouraged" to spend 21 percent of the monies actually expended for construction contracts, 25 percent of the monies actually expended for architectural and engineering contracts, 24 percent of the monies actually expended for commodities and 50.5 percent of the monies actually expended for contractual services during the fiscal year for the purpose of entering into contracts with certified MBEs. The statute also provided that state agencies are allowed to allocate certain percentages for black Americans, Hispanic Americans and for American women, and the goals are broken down by construction contracts, architectural and engineering contracts, commodities and contractual services.

The State took the position that the spending goals were "precatory." The court found that the plaintiffs had standing to maintain the action and to pursue prospective relief. The court held that the statute was unconstitutional based on the finding that the spending goals were not narrowly tailored to achieve a governmental interest. The court did not specifically address whether the articulated reasons for the goals contained in the statute had sufficient evidence, but instead found that the articulated reason would, "if true," constitute a compelling governmental interest necessitating race-conscious remedies. Rather than explore the evidence, the court focused on the narrowly tailored requirement and held that it was not satisfied by the State.

The court found that there was no evidence in the record that the State contemplated race-neutral means to accomplish the objectives set forth in Section 287.09451 *et seq.*, such as "simplification of bidding procedures, relaxation of bonding requirements, training or financial aid for disadvantaged entrepreneurs of all races [which] would open the public contracting market to all those who have suffered the effects of past discrimination." <u>Florida A.G.C. Council</u>, 303 F.Supp.2d at 1315, quoting <u>Eng'g Contractors Ass'n</u>, 122 F.3d at 928, quoting <u>Croson</u>, 488 U.S. at 509-10.

The court noted that defendants did not seem to disagree with the report issued by the State of Florida Senate that concluded there was little evidence to support the spending goals outlined in the statute. Rather, the State of Florida argued that the statute is "permissive." The court, however, held that "there is no distinction between a statute that is precatory versus one that is compulsory when the challenged statute 'induces an employer to hire with an eye toward meeting ... [a] numerical target.' Florida A.G.C. Council, 303 F.Supp.2d at 1316.

The court found that the State applies pressure to State agencies to meet the legislative objectives of the statute extending beyond simple outreach efforts. The State agencies, according to the court, were required to coordinate their MBE procurement activities with the OSD, which includes adopting a MBE utilization plan. If the State agency deviated from the Utilization Plan in two consecutive and three out of five total fiscal years, then the OSD could review any and all solicitations and contract awards of the agency as deemed necessary until such time as the agency met its utilization plan. The court held that based on these factors, although alleged to be "permissive," the statute textually was not.

Therefore, the court found that the statute was not narrowly tailored to serve a compelling governmental interest, and consequently violated the Equal Protection Clause of the Fourteenth Amendment.

The Builders Ass'n of Greater Chicago v. The City of Chicago, 298 F. Supp. 2d 725 (N.D. III. 2003)

This case is instructive because of the court's focus and analysis on whether the City of Chicago's MBE/WBE program was narrowly tailored. The basis of the court's holding that the program was not narrowly tailored is instructive for any program considered because of the reasons provided as to why the program did not pass muster.

The plaintiff, the Builders Association of Greater Chicago, brought this suit challenging the constitutionality of the City of Chicago's construction Minority- and Women-Owned Business ("MWBE") Program. The court held that the City of Chicago's MWBE program was unconstitutional because it did not satisfy the requirement that it be narrowly tailored to achieve a

compelling governmental interest. The court held that it was not narrowly tailored for several reasons, including because there was no "meaningful individualized review" of MBE/WBEs; it had no termination date nor did it have any means for determining a termination; the "graduation" revenue amount for firms to graduate out of the program was very high, \$27,500,000 and in fact very few firms graduated; there was no net worth threshold; and, waivers were rarely or never granted on construction contracts. The court found that the City program was a "rigid numerical quota," a quota related not to the number of available, willing and able firms. Formulistic percentages, the court held, could not survive the strict scrutiny.

The court held that the goals plan did not address issues raised as to discrimination regarding market access and credit. The court found that a goals program does not directly impact prime contractor's selection of subcontractors on non-goals private projects. The court found that a set-aside or goals program does not directly impact difficulties in accessing credit, and does not address discriminatory loan denials or higher interest rates. The court found the City has not sought to attack discrimination by primes directly, "but it could." 298 F.2d 725. "To monitor possible discriminatory conduct it could maintain its certification list and require those contracting with the City to consider unsolicited bids, to maintain bidding records, and to justify rejection of any certified firm submitting the lowest bid. It could also require firms seeking City work to post private jobs above a certain minimum on a website or otherwise provide public notice ..." Id.

The court concluded that other race-neutral means were available to impact credit, high interest rates, and other potential marketplace discrimination. The court pointed to race-neutral means including linked deposits, with the City banking at institutions making loans to startup and smaller firms. Other race-neutral programs referenced included quick pay and contract downsizing; restricting self-performance by prime contractors; a direct loan program; waiver of bonds on contracts under \$100,000; a bank participation loan program; a 2 percent local business preference; outreach programs and technical assistance and workshops; and seminars presented to new construction firms.

The court held that race and ethnicity do matter, but that racial and ethnical classifications are highly suspect, can be used only as a last resort, and cannot be made by some mechanical formulation. Therefore, the court concluded the City's MWBE Program could not stand in its present guise. The court held that the present program was not narrowly tailored to remedy past discrimination and the discrimination demonstrated to now exist.

The court entered an injunction, but delayed the effective date for six months from the date of its Order, December 29, 2003. The court held that the City had a "compelling interest in not having its construction projects slip back to near monopoly domination by white male firms." The court ruled a brief continuation of the program for six months was appropriate "as the City rethinks the many tools of redress it has available." Subsequently, the court declared unconstitutional the City's MWBE Program with respect to construction contracts and permanently enjoined the City from enforcing the Program. 2004 WL 757697 (N.D. Ill 2004).

19. <u>Associated Utility Contractors of Maryland, Inc. v. Mayor and City</u> <u>Council of Baltimore</u>, 218 F. Supp. 2d 749 (D. Md. 2002)

This case is instructive because the court found the Executive Order of the Mayor of the City of Baltimore was precatory in nature (creating no legal obligation or duty) and contained no enforcement mechanism or penalties for noncompliance and imposed no substantial restrictions; the Executive Order announced goals that were found to be aspirational only.

The Associated Utility Contractors of Maryland, Inc. ("AUC") sued the City of Baltimore challenging its ordinance providing for minority and women-owned business enterprise ("MWBE") participation in city contracts. Previously, an earlier City of Baltimore MWBE program was declared unconstitutional. Associated Utility Contractors of Maryland, Inc. v. Mayor and City Council of Baltimore, 83 F. Supp. 2d 613 (D. Md. 2000). The City adopted a new ordinance that provided for the establishment of MWBE participation goals on a contract-by-contract basis, and made several other changes from the previous MWBE program declared unconstitutional in the earlier case.

In addition, the Mayor of the City of Baltimore issued an Executive Order that announced a goal of awarding 35 percent of all City contracting dollars to MBE/WBEs. The court found this goal of 35 percent participation was aspirational only and the Executive Order contained no enforcement mechanism or penalties for noncompliance. The Executive Order also specified many "noncoercive" outreach measures to be taken by the City agencies relating to increasing participation of MBE/WBEs. These measures were found to be merely aspirational and no enforcement mechanism was provided.

The court addressed in this case only a motion to dismiss filed by the City of Baltimore arguing that the Associated Utility Contractors had no standing. The court denied the motion to dismiss holding that the association had standing to challenge the new MBE/WBE ordinance, although the court noted that it had significant issues with the AUC having representational standing because of the nature of the MBE/WBE plan and the fact the AUC did not have any of its individual members named in the suit. The court also held that the AUC was entitled to bring an as applied challenge to the Executive Order of the Mayor, but rejected it having standing to bring a facial challenge based on a finding that it imposes no requirement, creates no sanctions, and does not inflict an injury upon any member of the AUC in any concrete way. Therefore, the Executive Order did not create a "case or controversy" in connection with a facial attack. The court found the wording of the Executive Order to be precatory and imposing no substantive restrictions.

After this decision the City of Baltimore and the AUC entered into a settlement agreement and a dismissal with prejudice of the case. An order was issued by the court on October 22, 2003 dismissing the case with prejudice.

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

The court held unconstitutional the City of Baltimore's "affirmative action" program, which had construction subcontracting "set-aside" goals of 20 percent for MBEs and 3 percent for WBEs. The court held there was no data or statistical evidence submitted by the City prior to enactment of the Ordinance. There was no evidence showing a disparity between MBE/WBE availability and utilization in the subcontracting construction market in Baltimore. The court enjoined the City Ordinance.

21. <u>Webster v. Fulton County</u>, 51 F. Supp. 2d 1354 (N.D. Ga. 1999), a'ffd per curiam 218 F.3d 1267 (11th Cir. 2000)

This case is instructive as it is another instance in which a court has considered, analyzed, and ruled upon a race-, ethnicity- and gender-conscious program, holding the local government MBE/WBE-type program failed to satisfy the strict scrutiny constitutional standard. The case also is instructive in its application of the <u>Engineering Contractors Association</u> case, including to a disparity analysis, the burdens of proof on the local government, and the narrowly tailored prong of the strict scrutiny test.

In this case, plaintiff Webster brought an action challenging the constitutionality of Fulton County's (the "County") minority and female business enterprise program ("M/FBE") program. 51 F. Supp. 2d 1354, 1357 (N.D. Ga. 1999). [The district court first set forth the provisions of the M/FBE program and conducted a standing analysis at 51 F. Supp. 2d at 1356-62].

The court, citing Engineering Contractors Association of S. Florida, Inc. v. Metro. Engineering Contractors Association, 122 F.3d 895 (11th Cir. 1997), held that "[e]xplicit racial preferences may not be used except as a 'last resort.'" <u>Id.</u> at 1362-63. The court then set forth the strict scrutiny standard for evaluating racial and ethnic preferences and the four factors enunciated in <u>Engineering Contractors Association</u>, and the intermediate scrutiny standard for evaluating gender preferences. <u>Id.</u> at 1363. The court found that under <u>Engineering Contractors Association</u>, the government could utilize both post-enactment and pre-enactment evidence to meet its burden of a "strong basis in evidence" for strict scrutiny, and "sufficient probative evidence" for intermediate scrutiny. <u>Id.</u>

The court found that the defendant bears the initial burden of satisfying the aforementioned evidentiary standard, and the ultimate burden of proof remains with the challenging party to demonstrate the unconstitutionality of the M/FBE program. <u>Id.</u> at 1364. The court found that the plaintiff has at least three methods "to rebut the inference of discrimination with a neutral explanation: (1) demonstrate that the statistics are flawed; (2) demonstrate that the disparities shown by the statistics are not significant; or (3) present conflicting statistical data." <u>Id.</u>, citing <u>Eng'g Contractors Ass'n</u>, 122 F.3d at 916.

[The district court then set forth the Engineering Contractors Association opinion in detail.]

The court first noted that the Eleventh Circuit has recognized that disparity indices greater than 80 percent are generally not considered indications of discrimination. <u>Id.</u> at 1368, citing <u>Eng'g Contractors Assoc.</u>, 122 F.3d at 914. The court then considered the County's pre-1994 disparity study (the "Brimmer-Marshall Study") and found that it failed to establish a strong basis in evidence necessary to support the M/FBE program. <u>Id.</u> at 1368.

First, the court found that the study rested on the inaccurate assumption that a statistical showing of underutilization of minorities in the marketplace as a whole was sufficient evidence of discrimination. Id. at 1369. The court cited City of Richmond v. J.A. Croson Co., 488 U.S. 496 (1989) for the proposition that discrimination must be focused on contracting by the entity that is considering the preference program. Id. Because the Brimmer-Marshall Study contained no statistical evidence of discrimination by the County in the award of contracts, the court found the County must show that it was a "passive participant" in discrimination by the private sector. Id. The court found that the County could take remedial action if it had evidence that prime contractors were systematically excluding minority-owned businesses from subcontracting opportunities, or if it had evidence that its

spending practices are "exacerbating a pattern of prior discrimination that can be identified with specificity." <u>Id.</u> However, the court found that the Brimmer-Marshall Study contained no such data. Id.

Second, the Brimmer-Marshall study contained no regression analysis to account for relevant variables, such as firm size. <u>Id.</u> at 1369-70. At trial, Dr. Marshall submitted a follow-up to the earlier disparity study; however, the court found the study had the same flaw in that it did not contain a regression analysis. <u>Id.</u> The court thus concluded that the County failed to present a "strong basis in evidence" of discrimination to justify the County's racial and ethnic preferences. <u>Id.</u>

The court next considered the County's post-1994 disparity study. <u>Id.</u> at 1371. The study first sought to determine the availability and utilization of minority- and female-owned firms. <u>Id.</u> The court explained:

Two methods may be used to calculate availability: (1) bid analysis; or (2) bidder analysis. In a bid analysis, the analyst counts the number of bids submitted by minority or female firms over a period of time and divides it by the total number of bids submitted in the same period. In a bidder analysis, the analyst counts the number of minority or female firms submitting bids and divides it by the total number of firms which submitted bids during the same period.

<u>Id.</u> The court found that the information provided in the study was insufficient to establish a firm basis in evidence to support the M/FBE program. <u>Id.</u> at 1371-72. The court also found it significant to conduct a regression analysis to show whether the disparities were either due to discrimination or other neutral grounds. <u>Id.</u> at 1375-76.

The plaintiff and the County submitted statistical studies of data collected between 1994 to 1997. <u>Id.</u> at 1376. The court found that the data were potentially skewed due to the operation of the M/FBE program. <u>Id.</u> Additionally, the court found that the County's standard deviation analysis yielded non-statistically significant results (noting the Eleventh Circuit has stated that scientists consider a finding of two standard deviations significant). <u>Id.</u> (internal citations omitted).

The court considered the County's anecdotal evidence, and quoted <u>Engineering Contractors</u> <u>Association</u> for the proposition that "[a]necdotal evidence can play an important role in bolstering statistical evidence, but that only in the rare case will anecdotal evidence suffice standing alone." <u>Id.</u>, quoting <u>Eng'g Contractors Ass'n</u>, 122 F.3d at 907. The Brimmer-Marshall Study contained anecdotal evidence. <u>Id.</u> at 1379. Additionally, the County held hearings but after reviewing the tape recordings of the hearings, the court concluded that only two individuals testified to discrimination by the County; one of them complained that the County used the M/FBE program to only benefit African Americans. <u>Id.</u> The court found the most common complaints concerned barriers in bonding, financing, and insurance and slow payment by prime contractors. <u>Id.</u> The court concluded that the anecdotal evidence was insufficient in and of itself to establish a firm basis for the M/FBE program. <u>Id.</u>

The court also applied a narrow tailoring analysis of the M/FBE program. "The Eleventh Circuit has made it clear that the essence of this inquiry is whether racial preferences were adopted only as a 'last resort." <u>Id.</u> at 1380, citing <u>Eng'g Contractors Assoc.</u>, 122 F.3d at 926. The court cited the Eleventh Circuit's four-part test and concluded that the County's M/FBE program failed on several grounds. First, the court found that a race-based problem does not necessarily require a race-based solution. "If a race-neutral remedy is sufficient to cure a race-based problem, then a race-conscious remedy can never be narrowly tailored to that problem." <u>Id.</u>, quoting <u>Eng'g Contractors Ass'n</u>, 122 F.3d at 927. The court found that there was no evidence of discrimination by the County. <u>Id.</u> at 1380.

The court found that even though a majority of the Commissioners on the County Board were African American, the County had continued the program for decades. <u>Id.</u> The court held that the County had not seriously considered race-neutral measures:

There is no evidence in the record that any Commissioner has offered a resolution during this period substituting a program of race-neutral measures as an alternative to numerical set-asides based upon race and ethnicity. There is no evidence in the record of any proposal by the staff of Fulton County of substituting a program of race-neutral measures as an alternative to numerical set-asides based upon race and ethnicity. There has been no evidence offered of any debate within the Commission about substituting a program of race-neutral measures as an alternative to numerical set-asides based upon race and ethnicity Id.

The court found that the random inclusion of ethnic and racial groups who had not suffered discrimination by the County also mitigated against a finding of narrow tailoring. <u>Id.</u> The court found that there was no evidence that the County considered race-neutral alternatives as an alternative to race-conscious measures nor that race-neutral measures were initiated and failed. <u>Id.</u> at 1381. The court concluded that because the M/FBE program was not adopted as a last resort, it failed the narrow tailoring test. <u>Id.</u>

Additionally, the court found that there was no substantial relationship between the numerical goals and the relevant market. <u>Id.</u> The court rejected the County's argument that its program was permissible because it set "goals" as opposed to "quotas," because the program in <u>Engineering Contractors Association</u> also utilized "goals" and was struck down. <u>Id.</u>

Per the M/FBE program's gender-based preferences, the court found that the program was sufficiently flexible to satisfy the substantial relationship prong of the intermediate scrutiny standard. <u>Id.</u> at 1383. However, the court held that the County failed to present "sufficient probative evidence" of discrimination necessary to sustain the gender-based preferences portion of the M/FBE program. <u>Id.</u>

The court found the County's M/FBE program unconstitutional and entered a permanent injunction in favor of the plaintiff. <u>Id.</u> On appeal, the Eleventh Circuit affirmed per curiam, stating only that it affirmed on the basis of the district court's opinion. <u>Webster v. Fulton County, Georgia</u>, 218 F.3d 1267 (11th Cir. 2000).

22. <u>Associated Gen. Contractors v. Drabik</u>, 50 F. Supp. 2d 741 (S.D. Ohio 1999)

In this decision, the district court reaffirmed its earlier holding that the State of Ohio's MBE program of construction contract awards is unconstitutional. The court cited to <u>F. Buddie Contracting v. Cuyahoga Community College</u>, 31 F. Supp. 2d 571 (N.D. Ohio 1998), holding a similar local Ohio program unconstitutional. The court repudiated the Ohio Supreme Court's holding in <u>Ritchey Produce</u>, 707 N.E. 2d 871 (Ohio 1999), which held that the State's MBE program as applied to the state's purchase of non-construction-related goods and services was constitutional. The court found the evidence to be insufficient to justify the MBE program. The court held that the program was not narrowly tailored because there was no evidence that the State had considered a race-neutral alternative.

This opinion underscored that governments must show four factors to demonstrate narrow tailoring: (1) the necessity for the relief and the efficacy of alternative remedies, (2) flexibility and duration of the relief, (3) relationship of numerical goals to the relevant labor market, and (4) impact of the relief on the rights of third parties. The court held the Ohio MBE program failed to satisfy this test.

23. Phillips & Jordan, Inc. v. Watts, 13 F. Supp. 2d 1308 (N.D. Fla. 1998)

This case is instructive because it addressed a challenge to a state and local government MBE/WBE-type program and considered the requisite evidentiary basis necessary to support the program. In Phillips & Jordan, the district court for the Northern District of Florida held that the Florida Department of Transportation's ("FDOT") program of "setting aside" certain highway maintenance contracts for African American- and Hispanic-owned businesses violated the Equal Protection Clause of the Fourteenth Amendment to the United States Constitution. The parties stipulated that the plaintiff, a non-minority business, had been excluded in the past and may be excluded in the future from competing for certain highway maintenance contracts "set aside" for business enterprises owned by Hispanic and African American individuals. The court held that the evidence of statistical disparities was insufficient to support the Florida DOT program.

The district court pointed out that Florida DOT did not claim that it had evidence of intentional discrimination in the award of its contracts. The court stated that the essence of FDOT's claim was that the two year disparity study provided evidence of a disparity between the proportion of minorities awarded FDOT road maintenance contracts and a portion of the minorities "supposedly willing and able to do road maintenance work," and that FDOT did not itself engage in any racial or ethnic discrimination, so FDOT must have been a passive participant in "somebody's" discriminatory practices.

Since it was agreed in the case that FDOT did not discriminate against minority contractors bidding on road maintenance contracts, the court found that the record contained insufficient proof of discrimination. The court found the evidence insufficient to establish acts of discrimination against African American- and Hispanic-owned businesses.

The court raised questions concerning the choice and use of the statistical pool of available firms relied upon by the disparity study. The court expressed concern about whether it was appropriate to use Census data to analyze and determine which firms were available (qualified and/or willing and able) to bid on FDOT road maintenance contracts.

Recent State Court Decisions

24. <u>Cleveland Constr., Inc. v. City of Cincinnatti</u>, 169 Ohio App. 3d 627, 864 N.E.2d 116 (2006), cert. denied 128 S. Ct. 379 (U.S. 2007)

On appeal from Cleveland Construction, Inc. v. City of Cincinnati, WL 4880918, Case No. A042683 (Ohio Court of Common Pleas, July 13, 2005 and August 29, 2005) (at Section V©(2a.), infra), the Ohio Court of Appeals reversed the trial court's entry of a directed verdict against Cleveland Construction on the issue of lost profits, remanded the case for a new trial on the issue of liability and damages under 42 U.S.C. § 1983, and affirmed the trial court in all other respects. 864 N.E.2d 116, 133 (Ohio App. 2006).

On appeal, both parties below raised multiple enumerations of error with the trial court's decision. In the decision below, the trial court ruled that the City's SBE Program created constitutionally impermissible race- and gender-based classifications. (See 2005 Decision, at Section V©(2a.), infra). In its fourth enumeration of error, the city argued that its SBE Program should not be subject to strict scrutiny (for race-based classification) or intermediate scrutiny (for gender-based classification). The City argued that its SBE Program did not create race- or gender-based classifications because the City merely gathered availability estimates "for information purposes only" and bidders were required only to document their good faith efforts at obtaining minority- and women-owned business participation. The Court of Appeals rejected that argument holding that rigid quotas or set-asides are not a prerequisite to a finding of a racial classification: "[w]here regulations pressure or encourage contractors to hire minority subcontractors, courts must apply strict scrutiny." 864 N.E.2d at 126. The court noted that in Adarand I, although the challenged regulations did not require contractors to hire minority subcontractors, they offered a financial incentive to do so, and the regulations were thus subject to strict scrutiny. Id. at 127, citing Adarand Constructors v. Pena, 515 U.S. 200, 224 (1995).

The Court of Appeals determined that it had to look beyond the SBE Program's "ostensibly neutral labels such as 'outreach program' and 'participation goals'" to determine whether the SBE Program imposed racial classifications. Id. at 127. The court found that under the SBE Program, bidders were required to use good faith efforts to promote opportunities for minority- and women-owned businesses to the extent of their availability as determined by the City, and to submit detailed descriptions of those good faith efforts. The court held that "[w]here the city's SBE program required documentation of a bidder's specific efforts to achieve the participation of minority subcontractors to the extent of their availability as predetermined by the city, the program undeniably pressured bidders to implement racial preferences. Therefore, the program's rules must be subject to strict scrutiny." Id. at 127. The court held that to the extent the SBE Program pressured contractors to utilize female-owned subcontractors, that portion was subject to intermediate scrutiny. Because the City conceded that its SBE Program could not survive either standard of heightened scrutiny, the court affirmed the trial court's finding holding unconstitutional those portions of the SBE Program causing bidders to use racial- or gender-based preferences. The court also overruled the City's enumeration of error over the trial court's award of prevailing party attorneys' fees to the plaintiff.

The Court of Appeals reversed the trial court's entry of a directed verdict for the city on the plaintiff's claim for lost profit damages. The court confirmed that under Ohio law, a disappointed bidder cannot recover lost profit damages when a municipality violates competitive-bidding laws. But, under 42 U.S.C. § 1983, a disappointed bidder may recover their lost profits as damages; the court cited to <u>Adarand</u>, <u>W.H. Scott Construction Co. v. Jackson</u>, and <u>Hershell Gill Consulting Engineers</u>, Inc. v. Miami-Dade

<u>County, Fla.</u> in support of that proposition. The court reversed the entry of a directed verdict and remanded to the trial court for a new trial on the issue of Section 1983 liability and damages.

Finally, the Court of Appeals affirmed the trial court's ruling that the named city officials sued in their individual capacities were entitled to qualified immunity. The court determined that due to complex nature of the issues, the city officials could not have reasonably known that their conduct was unconstitutional (required on order to overcome a qualified immunity defense).

The city subsequently applied for certiorari to the United States Supreme Court. The Supreme Court denied certiorari on October 9, 2007. 128 S. Ct. 379 (Oct. 9, 2007).

25. <u>Cleveland Constr., Inc. v. City of Cincinnati</u>, Case No. A042683, WL 4880918 (Ohio Court of Common Pleas, July 13, 2005 and August 29, 2005)

This case is instructive as it addresses the validity of the City of Cincinnati's program involving contracting with MBE/WBEs, information that a city may gather as to MBE/WBE participation, information that a city may track as to MBE/WBE participation, and the type of legislation the local or state governments may consider adopting. Cleveland Construction, Inc. (the "plaintiff") challenged the City of Cincinnati's (the "City") Small Business Enterprise Program (the "Program"), and a related SBE Subcontracting Outreach Program which applied to City-funded construction projects valued in excess of \$100,000. Case No. A0402638 (Ohio Common Pleas Court, July 13, 2005) at 5. The Program required prime contractors to subcontract a minimum percentage of their bid (20% or greater on some construction contracts) to qualified available minority subcontractors. Id.

The City stipulated that it lacked the necessary factual basis to withstand a strict scrutiny analysis, or even an intermediate scrutiny analysis, of its Program. Id. at 10-11. The court then considered whether the Program imposed classifications subject to such analyses. Id. The court found that "the law does not prohibit governmental entities from recording statistics relating to race or gender, or from tracking the progress of groups as identified by such categories, or from seeking to ascertain whether any impermissible, discriminatory barriers are hampering the advancement of individuals within groups as defined by race or gender." Id. at 12. Accordingly, the court found that the City could use MBE/WBE annual participation goals in conjunction with such a tracking program, and other outreach efforts, as long as such efforts included no "further mechanism to promote or effectuate or encourage others to meet such goals in any particular context." Id. (internal citations omitted).

However, the court found that where outreach efforts operate as "a *sub rosa* preference — that is, where their administration 'indisputably pressures' contractors to hire minority subcontractors — courts must apply strict scrutiny." <u>Id</u>. at 12-13. The court found that the Program contained a number of race- and gender-classification provisions and "indisputably pressures" contractors to recruit minority subcontractors, including requisite documentation of good faith outreach efforts and potential investigation of recruitment efforts by the Office of Contract Compliance; accordingly, the Program was subject to strict scrutiny. <u>Id</u>. at 13-14. Because the City conceded that the Program could not survive a strict scrutiny analysis, the court found the Program facially unconstitutional and ordered the City to take prompt action to remove all such unconstitutional provisions. <u>Id</u>. at 15. However, the court found the plaintiff was unable to demonstrate that the unconstitutional aspects of the Program caused him to lose the contract award at issue. <u>Id</u>. at 18.

G. Recent Decisions and Authorities Involving Federal Procurement That May Impact MBE/WBE and DBE Programs

1. Rothe Development Corp. v. U.S. Department of Defense, 545 F.3d 1023 (Fed. Cir. 2008)

Although this case does not involve the Federal DBE Program (49 C.F.R. Part 26), it is an analogous case that may impact the legal analysis and law related to the validity of programs implemented by recipients of federal funds, including the Federal DBE Program. Additionally, it underscores the requirement that race-, ethnic- and gender-based programs of any nature must be supported by substantial evidence. In Rothe, an unsuccessful bidder on a federal defense contract brought suit alleging that the application of an evaluation preference, pursuant to a federal statute, to a small disadvantaged bidder (SDB) to whom a contract was awarded, violated the Equal Protection clause of the U.S. Constitution. The federal statute challenged is Section 1207 of the National Defense Authorization Act of 1987 and as reauthorized in 2003. The statute provides a goal that 5 percent of the total dollar amount of defense contracts for each fiscal year would be awarded to small businesses owned and controlled by socially and economically disadvantages individuals. 10 U.S.C. § 2323. Congress authorized the DOD to adjust bids submitted by non-socially and economically disadvantaged firms upwards by 10 percent (the "Price Evaluation Adjustment Program" or "PEA").

The district court held the federal statute, as reauthorized in 2003, was constitutional on its face. The court held the 5 percent goal and the PEA program as reauthorized in 1992 and applied in 1998 was unconstitutional. The basis of the decision was that Congress considered statistical evidence of discrimination that established a compelling governmental interest in the reauthorization of the statute and PEA program in 2003. Congress had not documented or considered substantial statistical evidence that the DOD discriminated against minority small businesses when it enacted the statute in 1992 and reauthorized it in 1998. The plaintiff appealed the decision.

The Federal Circuit found that the "analysis of the facial constitutionality of an act is limited to evidence before Congress prior to the date of reauthorization." 413 F.3d 1327 (Fed. Cir. 2005)(affirming in part, vacating in part, and remanding 324 F. Supp. 2d 840 (W.D. Tex. 2004). The court limited its review to whether Congress had sufficient evidence in 1992 to reauthorize the provisions in 1207. The court held that for evidence to be relevant to a strict scrutiny analysis, "the evidence must be proven to have been before Congress prior to enactment of the racial classification." The Federal Circuit held that the district court erred in relying on the statistical studies without first determining whether the studies were before Congress when it reauthorized section 1207. The Federal Circuit remanded the case and directed the district court to consider whether the data presented was so outdated that it did not provide the requisite strong basis in evidence to support the reauthorization of section 1207.

On August 10, 2007 the Federal District Court for the Western District of Texas in Rothe Development Corp. v. U.S. Dept. of Defense, 499 F.Supp.2d 775 (W.D.Tex. Aug 10, 2007) issued its Order on remand from the Federal Circuit Court of Appeals decision in Rothe, 413 F.3d 1327 (Fed Cir. 2005). The district court upheld the constitutionality of the 2006 Reauthorization of Section 1207 of the National Defense Authorization Act of 1987 (10 USC § 2323), which permits the U.S. Department of Defense to provide preferences in selecting bids submitted by small businesses owned by socially and economically disadvantaged individuals ("SDBs"). The district

court found the 2006 Reauthorization of the 1207 Program satisfied strict scrutiny, holding that Congress had a compelling interest when it reauthorized the 1207 Program in 2006, that there was sufficient statistical and anecdotal evidence before Congress to establish a compelling interest, and that the reauthorization in 2006 was narrowly tailored.

The district court, among its many findings, found certain evidence before Congress was "stale," that the plaintiff (Rothe) failed to rebut other evidence which was not stale, and that the decisions by the Eighth, Ninth and Tenth Circuits in the decisions in <u>Concrete Works</u>, <u>Adarand Constructors</u>, <u>Sherbrooke Turf</u> and <u>Western States Paving</u> (discussed above and below) were relevant to the evaluation of the facial constitutionality of the 2006 Reauthorization.

2007 Order of the District Court (499 F.Supp. 2d 775). In the Section 1207 Act, Congress set a goal that 5 percent of the total dollar amount of defense contracts for each fiscal year would be awarded to small businesses owned and controlled by socially and economically disadvantaged individuals. In order to achieve that goal, Congress authorized the DOD to adjust bids submitted by non-socially and economically disadvantaged firms up to 10 percent (the "Price Evaluation Adjustment Program" or "PEA") 10 U.S.C. § 2323(e)(3). Rothe, 499 F.Supp.2d. at 782. Plaintiff Rothe did not qualify as an SDB because it was owned by a Caucasian female. Although Rothe was technically the lowest bidder on a DOD contract, its bid was adjusted upward by 10 percent, and a third party, who qualified as a SDB, became the "lowest" bidder and was awarded the contract. Id. Rothe claims that the 1207 Program is facially unconstitutional because it takes race into consideration in violation of the Equal Protection component of the Due Process Clause of the Fifth Amendment. Id. at 782-83. The district court's decision only reviewed the facial constitutionality of the 2006 Reauthorization of the 2007 Program.

The district court initially rejected six legal arguments made by Rothe regarding strict scrutiny review based on the rejection of the same arguments by the Eighth, Ninth, and Tenth Circuit Courts of Appeal in the Sherbrooke Turf, Western States Paving, Concrete Works, Adarand VII cases, and the Federal Circuit Court of Appeal in Rothe. Rothe at 825-833.

The district court discussed and cited the decisions in <u>Adarand VII</u> (2000), <u>Sherbrooke Turf</u> (2003), and <u>Western States Paving</u> (2005), as holding that Congress had a compelling interest in eradicating the economic roots of racial discrimination in highway transportation programs funded by federal monies, and concluding that the evidence cited by the government, particularly that contained in *The Compelling Interest* (a.k.a. the *Appendix*), more than satisfied the government's burden of production regarding the compelling interest for a race-conscious remedy. <u>Rothe</u> at 827. Because the Urban Institute Report, which presented its analysis of 39 state and local disparity studies, was cross-referenced in the *Appendix*, the district court found the courts in <u>Adarand VII</u>, <u>Sherbrooke Turf</u>, and <u>Western States Paving</u>, also relied on it in support of their compelling interest holding. <u>Id.</u> at 827.

The district court also found that the Tenth Circuit decision in Concrete Works IV, 321 F.3d 950 (10th Cir. 2003), established legal principles that are relevant to the court's strict scrutiny analysis. First, Rothe's claims for declaratory judgment on the racial constitutionality of the earlier 1999 and 2002 Reauthorizations were moot. Second, the government can meet its burden of production without conclusively proving the existence of past or present racial discrimination. Third, the government may establish its own compelling interest by presenting evidence of its own direct participation in racial discrimination or its passive participation in private discrimination. Fourth,

once the government meets its burden of production, Rothe must introduce "credible, particularized" evidence to rebut the government's initial showing of the existence of a compelling interest. Fifth, Rothe may rebut the government's statistical evidence by giving a race-neutral explanation for the statistical disparities, showing that the statistics are flawed, demonstrating that the disparities shown are not significant or actionable, or presenting contrasting statistical data. Sixth, the government may rely on disparity studies to support its compelling interest, and those studies may control for the effect that pre-existing affirmative action programs have on the statistical analysis. <u>Id.</u> at 829-32.

Based on <u>Concrete Works IV</u>, the district court did not require the government to conclusively prove that there is pervasive discrimination in the relevant market, that each presumptively disadvantaged group suffered equally from discrimination, or that private firms intentionally and purposefully discriminated against minorities. The court found that the inference of discriminatory exclusion can arise from statistical disparities. <u>Id.</u> at 830-31.

The district court held that Congress had a compelling interest in the 2006 Reauthorization of the 1207 Program, which was supported by a strong basis in the evidence. The court relied in significant part upon six state and local disparity studies that were before Congress prior to the 2006 Reauthorization of the 1207 Program. The court based this evidence on its finding that Senator Kennedy had referenced these disparity studies, discussed and summarized findings of the disparity studies, and Representative Cynthia McKinney also cited the same six disparity studies that Senator Kennedy referenced. The court stated that based on the content of the floor debate, it found that these studies were put before Congress prior to the date of the Reauthorization of Section 1207. Id. at 838.

The district court found that these six state and local disparity studies analyzed evidence of discrimination from a diverse cross-section of jurisdictions across the United States, and "they constitute prima facie evidence of a nation-wide pattern or practice of discrimination in public and private contracting." Id. at 838-39. The court found that the data used in these six disparity studies is not "stale" for purposes of strict scrutiny review. Id. at 839. The court disagreed with Rothe's argument that all the data was stale (data in the studies from 1997 through 2002), "because this data was the most current data available at the time that these studies were performed." Id. The court found that the governmental entities should be able to rely on the most recently available data so long as that data is reasonably up-to-date. Id. The court declined to adopt a "bright-line rule for determining staleness." Id.

The court referred to the reliance by the Ninth Circuit and the Eighth Circuit on the *Appendix* to affirm the constitutionality of the United States Department of Transportation MBE [now DBE] Program, and rejected five years as a bright-line rule for considering whether data is "stale." <u>Id</u>. at n.86. The court also stated that it "accepts the reasoning of the *Appendix*, which the court found stated that for the most part "the federal government does business in the same contracting markets as state and local governments. Therefore, the evidence in state and local studies of the impact of discriminatory barriers to minority opportunity in contracting markets throughout the country is relevant to the question whether the federal government has a compelling interest to take remedial action in its own procurement activities." <u>Id</u>. at 839, quoting <u>61 Fed.Reg</u>. 26042-01, 26061 (1996).

The district court also discussed additional evidence before Congress that it found in Congressional Committee Reports and Hearing Records. <u>Id.</u> at 865-71. The court noted SBA Reports that were before Congress prior to the 2006 Reauthorization. <u>Id.</u> at 871.

The district court found that the data contained in the *Appendix*, the Benchmark Study, and the Urban Institute Report was "stale," and the court did not consider those reports as evidence of a compelling interest for the 2006 Reauthorization. <u>Id.</u> at 872-75. The court stated that the Eighth, Ninth and Tenth Circuits relied on the *Appendix* to uphold the constitutionality of the Federal DBE Program, citing to the decisions in <u>Sherbrooke Turf</u>, <u>Adarand VII</u>, and <u>Western States Paving</u>. <u>Id.</u> at 872. The court pointed out that although it does not rely on the data contained in the *Appendix* to support the 2006 Reauthorization, the fact the Eighth, Ninth, and Tenth Circuits relied on this data to uphold the constitutionality of the Federal DBE Program as recently as 2005, convinced the court that a bright-line staleness rule is inappropriate. <u>Id.</u> at 874.

Although the court found that the data contained in the *Appendix*, the Urban Institute Report, and the Benchmark Study was stale for purposes of strict scrutiny review regarding the 2006 Reauthorization, the court found that Rothe introduced no concrete, particularized evidence challenging the reliability of the methodology or the data contained in the six state and local disparity studies, and other evidence before Congress. The court found that Rothe failed to rebut the data, methodology or anecdotal evidence with "concrete, particularized" evidence to the contrary. <u>Id.</u> at 875. The district court held that based on the studies, the government had satisfied its burden of producing evidence of discrimination against African Americans, Asian Americans, Hispanic Americans, and Native Americans in the relevant industry sectors. <u>Id.</u> at 876.

The district court found that Congress had a compelling interest in reauthorizing the 1207 Program in 2006, which was supported by a strong basis of evidence for remedial action. <u>Id.</u> at 877. The court held that the evidence constituted prima facie proof of a nationwide pattern or practice of discrimination in both public and private contracting, that Congress had sufficient evidence of discrimination throughout the United States to justify a nationwide program, and the evidence of discrimination was sufficiently pervasive across racial lines to justify granting a preference to all five purportedly disadvantaged racial groups. <u>Id.</u>

The district court also found that the 2006 Reauthorization of the 1207 Program was narrowly tailored and designed to correct present discrimination and to counter the lingering effects of past discrimination. The court held that the government's involvement in both present discrimination and the lingering effects of past discrimination was so pervasive that the Department of Defense and Department of Air Force had become passive participants in perpetuating it. <u>Id.</u> The court stated it was law of the case and could not be disturbed on remand that the Federal Circuit in <u>Rothe III</u> had held that the 1207 Program was flexible in application, limited in duration and it did not unduly impact on the rights of third parties. <u>Id.</u>, quoting <u>Rothe III</u>, 262 F.3d at 1331.

The district court thus conducted a narrowly tailored analysis that reviewed three factors:

- 1. The efficacy of race-neutral alternatives;
- 2. Evidence detailing the relationship between the stated numerical goal of 5 percent and the relevant market; and
- 3. Over- and under-inclusiveness.

<u>Id</u>. The court found that Congress examined the efficacy of race-neutral alternatives prior to the enactment of the 1207 Program in 1986 and that these programs were unsuccessful in remedying the effects of past and present discrimination in the federal procurement. <u>Id</u>. The court concluded that Congress had attempted to address the issues through race-neutral measures, discussed those measures, and found that Congress' adoption of race-conscious provisions were justified by the ineffectiveness of such race-neutral measures in helping minority-owned firms overcome barriers. <u>Id</u>. The court found that the government seriously considered and enacted race-neutral alternatives, but these race-neutral programs did not remedy the widespread discrimination that affected the federal procurement sector, and that Congress was not required to implement or exhaust every conceivable race-neutral alternative. <u>Id</u>. at 880. Rather, the court found that narrow tailoring requires only "serious, good faith consideration of workable race-neutral alternatives." <u>Id</u>.

The district court also found that the 5 percent goal was related to the minority business availability identified in the six state and local disparity studies. <u>Id.</u> at 881. The court concluded that the 5 percent goal was aspirational, not mandatory. <u>Id.</u> at 882. The court then examined and found that the regulations implementing the 1207 Program were not over-inclusive for several reasons.

November 4, 2008 decision by the Federal Circuit Court of Appeals. On November 4, 2008, the Federal Circuit Court of Appeals reversed the judgment of the district court in part, and remanded with instructions to enter a judgment (1) denying Rothe any relief regarding the facial constitutionality of Section 1207 as enacted in 1999 or 2002, (2) declaring that Section 1207 as enacted in 2006 (10 U.S.C. § 2323) is facially unconstitutional, and (3) enjoining application of Section 1207 (10 U.S.C. § 2323).

The Federal Circuit Court of Appeals held that Section 1207, on its face, as reenacted in 2006, violated the Equal Protection component of the Fifth Amendment right to due process. The court found that because the statute authorized the Department of Defense to afford preferential treatment on the basis of race, the court applied strict scrutiny, and because Congress did not have a "strong basis in evidence" upon which to conclude that the Department of Defense was a passive participant in pervasive, nationwide racial discrimination — at least not on the evidence produced by the Department of Defense and relied on by the district court in this case — Section 1207 failed to meet this strict scrutiny test. 545 F.3d at 1050.

Strict scrutiny framework. The Federal Circuit Court of Appeals recognized that the Supreme Court has held a government may have a compelling interest in remedying the effects of past or present racial discrimination. 545 F.3d at 1036. The court cited the decision in <u>Croson</u>, 488 U.S. at 492, that it is "beyond dispute that any public entity, state or federal, has a compelling interest in assuring that public dollars, drawn from the tax contributions of all citizens, do not serve to finance the evil of private prejudice." 545 F.3d. at 1036, quoting <u>Croson</u>, 488 U.S. at 492.

The court held that before resorting to race-conscious measures, the government must identify the discrimination to be remedied, public or private, with some specificity, and must have a strong basis of evidence upon which to conclude that remedial action is necessary. 545 F.3d at 1036, quoting Croson, 488 U.S. at 500, 504. Although the party challenging the statute bears the ultimate burden of persuading the court that it is unconstitutional, the Federal Circuit stated that the government first bears a burden to produce strong evidence supporting the legislature's decision to employ race-conscious action. 545 F.3d at 1036.

Even where there is a compelling interest supported by strong basis in evidence, the court held the statute must be narrowly tailored to further that interest. Id. The court noted that a narrow tailoring analysis commonly involves six factors: (1) the necessity of relief; (2) the efficacy of alternative, raceneutral remedies; (3) the flexibility of relief, including the availability of waiver provisions; (4) the relationship with the stated numerical goal to the relevant labor market; (5) the impact of relief on the rights of third parties; and (6) the overinclusiveness or underinclusiveness of the racial classification. Id.

Compelling interest – strong basis in evidence. The Federal Circuit pointed out that the statistical and anecdotal evidence relief upon by the district court in its ruling below included six disparity studies of state or local contracting. The Federal Circuit also pointed out that the district court found that the data contained in the Appendix, the Urban Institute Report, and the Benchmark Study were stale for purposes of strict scrutiny review of the 2006 Authorization, and therefore, the district court concluded that it would not rely on those three reports as evidence of a compelling interest for the 2006 reauthorization of the 1207 Program. 545 F.3d 1023, citing to Rothe VI, 499 F.Supp. 2d at 875. Since the Department of Defense did not challenge this finding on appeal, the Federal Circuit stated that it would not consider the Appendix, the Urban Institute Report, or the Department of Commerce Benchmark Study, and instead determined whether the evidence relied on by the district court was sufficient to demonstrate a compelling interest. Id.

Six state and local disparity studies. The Federal Circuit found that disparity studies can be relevant to the compelling interest analysis because, as explained by the Supreme Court in Croson, "[w]here 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 [a] locality or the locality's prime contractors, an inference of discriminatory exclusion could arise." 545 F.3d at 1037-1038, quoting Croson, 488 U.S.C. at 509. The Federal Circuit also cited to the decision by the Fifth Circuit Court of Appeals in W.H. Scott Constr. Co. v. City of Jackson, 199 F.3d 206 (5th Cir. 1999) that given Croson's emphasis on statistical evidence, other courts considering equal protection challenges to minority-participation programs have looked to disparity indices, or to computations of disparity percentages, in determining whether Croson's evidentiary burden is satisfied. 545 F.3d at 1038, quoting W.H. Scott, 199 F.3d at 218.

The Federal Circuit noted that a disparity study is a study attempting to measure the difference- or disparity- between the number of contracts or contract dollars actually awarded minority-owned businesses in a particular contract market, on the one hand, and the number of contracts or contract dollars that one would expect to be awarded to minority-owned businesses given their presence in that particular contract market, on the other hand. 545 F.3d at 1037.

Staleness. The Federal Circuit declined to adopt a per se rule that data more than five years old is stale per se, which rejected the argument put forth by Rothe. 545 F.3d at 1038. The court pointed out that the district court noted other circuit courts have relied on studies containing data more than five years old when conducting compelling interest analyses, citing to Western States Paving v. Washington State Department of Transportation, 407 F.3d 983, 992 (9th Cir. 2005) and Sherbrooke Turf, Inc. v. Minnesota Department of Transportation, 345 F.3d 964, 970 (8th Cir. 2003)(relying on the Appendix, published in 1996).

The Federal Circuit agreed with the district court that Congress "should be able to rely on the most recently available data so long as that data is reasonably up-to-date." 545 F.3d at 1039. The Federal Circuit affirmed the district court's conclusion that the data analyzed in the six disparity studies was not stale at the relevant time because the disparity studies analyzed data pertained to contracts awarded as recently as 2000 or even 2003, and because Rothe did not point to more recent, available data. <u>Id</u>.

Before Congress. The Federal Circuit found that for evidence to be relevant in the strict scrutiny analysis, it "must be proven to have been before Congress prior to enactment of the racial classification." 545 F.3d at 1039, quoting Rothe V, 413 F.3d at 1338. The Federal Circuit had issues with determining whether the six disparity studies were actually before Congress for several reasons, including that there was no indication that these studies were debated or reviewed by members of Congress or by any witnesses, and because Congress made no findings concerning these studies. 545 F.3d at 1039-1040. However, the court determined it need not decide whether the six studies were put before Congress, because the court held in any event that the studies did not provide a substantially probative and broad-based statistical foundation necessary for the strong basis in evidence that must be the predicate for nation-wide, race-conscious action. Id. at 1040.

The court did note that findings regarding disparity studies are to be distinguished from formal findings of discrimination by the Department of Defense "which Congress was emphatically not required to make." Id. at 1040, footnote 11 (emphasis in original). The Federal Circuit cited the Dean v. City of Shreveport case that the "government need not incriminate itself with a formal finding of discrimination prior to using a race-conscious remedy." 545 F.3d at 1040, footnote 11 quoting Dean v. City of Shreveport, 438 F.3d 448, 445 (5th Cir. 2006).

Methodology. The Federal Circuit found that there were methodological defects in the six disparity studies. The court found that the objections to the parameters used to select the relevant pool of contractors was one of the major defects in the studies. 545 F.3d at 1040-1041.

The court stated that in general, "[a] disparity ratio less than 0.80" — i.e., a finding that a given minority group received less than 80 percent of the expected amount — "indicates a relevant degree of disparity," and "might support an inference of discrimination." 545 F.3d at 1041, quoting the district court opinion in Rothe VI, 499 F.Supp. 2d at 842; and citing Engineering Contractors Association of South Florida, Inc. v. Metropolitan Dade County, 122 F.3d 895, 914 (11th Cir. 1997). The court noted that this disparity ratio attempts to calculate a ratio between the expected contract amount of a given race/gender group and the actual contract amount received by that group. 545 F.3d at 1041.

The court considered the availability analysis, or benchmark analysis, which is utilized to ensure that only those minority-owned contractors who are qualified, willing and able to perform the prime contracts at issue are considered when performing the denominator of a disparity ratio. 545 F.3d at 1041. The court cited to an expert used in the case that a "crucial question" in disparity studies is to develop a credible methodology to estimate this benchmark share of contracts minorities would receive in the absence of discrimination and the touchstone for measuring the benchmark is to determine whether the firm is ready, willing, and able to do business with the government. 545 F.3d at 1041-1042.

The court concluded the contention by Rothe, that the six studies misapplied this "touchstone" of Croson and erroneously included minority-owned firms that were deemed willing or potentially willing and able, without regard to whether the firm was qualified, was not a defect that substantially undercut the results of four of the six studies, because "the bulk of the businesses considered in these studies were identified in ways that would tend to establish their qualifications, such as by their presence on city contract records and bidder lists." 545 F.3d at 1042. The court noted that with regard to these studies available prime contractors were identified via certification lists, willingness survey of chamber membership and trade association membership lists, public agency and certification lists, utilized prime contractor, bidder lists, county and other government records and other type lists. Id.

The court stated it was less confident in the determination of qualified minority-owned businesses by the two other studies because the availability methodology employed in those studies, the court found, appeared less likely to have weeded out unqualified businesses. Id. However, the court stated it was more troubled by the failure of five of the studies to account officially for potential differences in size, or "relative capacity," of the business included in those studies. 545 F.3d at 1042-1043.

The court noted that qualified firms may have substantially different capacities and thus might be expected to bring in substantially different amounts of business even in the absence of discrimination. 545 F.3d at 1043. The Federal Circuit referred to the Eleventh Circuit explanation similarly that because firms are bigger, bigger firms have a bigger chance to win bigger contracts, and thus one would expect the bigger (on average) non-MWBE firms to get a disproportionately higher percentage of total construction dollars awarded than the smaller MWBE firms. 545 F.3d at 1043 quoting Engineering Contractors Association, 122 F.3d at 917. The court pointed out its issues with the studies accounting for the relative sizes of contracts awarded to minority-owned businesses, but not considering the relative sizes of the businesses themselves. Id. at 1043.

The court noted that the studies measured the availability of minority-owned businesses by the percentage of firms in the market owned by minorities, instead of by the percentage of total marketplace capacity those firms could provide. Id. The court said that for a disparity ratio to have a significant probative value, the same time period and metric (dollars or numbers) should be used in measuring the utilization and availability shares. 545 F.3d at 1044, n. 12.

The court stated that while these parameters relating to the firm size may have ensured that each minority-owned business in the studies met a capacity threshold, these parameters did not account for the relative capacities of businesses to bid for more than one contract at a time, which failure rendered the disparity ratios calculated by the studies substantially less probative on their own, of the likelihood of discrimination. Id. at 1044. The court pointed out that the studies could have accounted for firm size even without changing the disparity ratio methodologies by employing regression analysis to determine whether there was a statistically significant correlation between the size of a firm and the share of contract dollars awarded to it. 545 F.3d at 1044 citing to Engineering Contractors Association, 122 F.3d at 917. The court noted that only one of the studies conducted this type of regression analysis, which included the independent variables of a firm-age of a company, owner education level, number of employees, percent of revenue from the private sector and owner experience for industry groupings. Id. at 1044-1045.

The court stated, to "be clear," that it did not hold that the defects in the availability and capacity analyses in these six disparity studies render the studies wholly unreliable for any purpose. Id. at 1045. The court said that where the calculated disparity ratios are low enough, the court does not foreclose the possibility that an inference of discrimination might still be permissible for some of the minority groups in some of the studied industries in some of the jurisdictions. Id. The court recognized that a minority-owned firm's capacity and qualifications may themselves be affected by discrimination. Id. The court held, however, that the defects it noted detracted dramatically from the probative value of the six studies, and in conjunction with their limited geographic coverage, rendered the studies insufficient to form the statistical core of the strong basis and evidence required to uphold the statute. Id.

Geographic coverage. The court pointed out that whereas municipalities must necessarily identify discrimination in the immediate locality to justify a race-based program, the court does not think that Congress needs to have had evidence before it of discrimination in all 50 states in order to justify the 1207 program. Id. The court stressed, however, that in holding the six studies insufficient in this particular case, "we do not necessarily disapprove of decisions by other circuit courts that have relied, directly or indirectly, on municipal disparity studies to establish a federal compelling interest." 545 F.3d at 1046. The court stated in particular, the Appendix relied on by the Ninth and Tenth Circuits in the context of certain race-conscious measures pertaining to federal highway construction, references the Urban Institute Report, which itself analyzed over 50 disparity studies and relied for its conclusions on over 30 of those studies, a far broader basis than the six studies provided in this case. Id.

Anecdotal evidence. The court held that given its holding regarding statistical evidence, it did not review the anecdotal evidence before Congress. The court did point out, however, that there was not evidence presented of a single instance of alleged discrimination by the Department of Defense in the course of awarding a prime contract, or to a single instance of alleged discrimination by a private contractor identified as the recipient of a prime defense contract. 545 F.3d at 1049. The court noted this lack of evidence in the context of the opinion in Croson that if a government has become a passive participant in a system of racial exclusion practiced by elements of the local construction industry, then that government may take affirmative steps to dismantle the exclusionary system. 545 F.3d at 1048, citing Croson, 488 U.S. at 492.

The Federal Circuit pointed out that the Tenth Circuit in Concrete Works noted the City of Denver offered more than dollar amounts to link its spending to private discrimination, but instead provided testimony from minority business owners that general contractors who use them in city construction projects refuse to use them on private projects, with the result that Denver had paid tax dollars to support firms that discriminated against other firms because of their race, ethnicity and gender. 545 F.3d at 1049, quoting Concrete Works, 321 F.3d at 976-977.

In concluding, the court stated that it stressed its holding was grounded in the particular items of evidence offered by the Department of Defense, and "should not be construed as stating blanket rules, for example about the reliability of disparity studies. As the Fifth Circuit has explained, there is no 'precise mathematical formula to assess the quantum of evidence that rises to the <u>Croson</u> 'strong basis in evidence' benchmark.'" 545 F.3d at 1049, quoting <u>W.H. Scott Constr. Co.</u>, 199 F.3d at 218 n.11.

Narrowly tailoring. The Federal Circuit only made two observations about narrowly tailoring, because it held that Congress lacked the evidentiary predicate for a compelling interest. First, it noted that the 1207 Program was flexible in application, limited in duration, and that it did not unduly impact on the rights of third parties. 545 F.3d at 1049. Second, the court held that the absence of strongly probative statistical evidence makes it impossible to evaluate at least one of the other narrowly tailoring factors. Without solid benchmarks for the minority groups covered by the Section 1207, the court said it could not determine whether the 5 percent goal is reasonably related to the capacity of firms owned by members of those minority groups — i.e., whether that goal is comparable to the share of contracts minorities would receive in the absence of discrimination." 545 F.3d at 1049-1050.

Dynalantic Corp. v. United States Dept. of Defense, 503 F. Supp. 2d 262 (D.D.C. 2007)

<u>Dynalantic Corp.</u> involves a recent challenge to the Department of Defense's ("DOD") utilization of the Small Business Administration's ("SBA") 8(a) Business Development Program (the "8(a) Program"). In its Order of August 23, 2007, the district court denied both parties' Motions for Summary Judgment because there was no information in the record regarding the evidence before Congress supporting its 2006 reauthorization of the program in question; the court directed the parties to propose future proceedings to supplement the record. 503 F. Supp. 2d 262, 263 (D.D.C. 2007).

The court first explained that the 8(a) Program sets a goal that no less than 5 percent of total prime federal contract and subcontract awards for each fiscal year be awarded to socially and economically disadvantaged individuals. <u>Id.</u> Each federal government agency is required to establish its own goal for contracting but the goals are not mandatory and there is no sanction for failing to meet the goal. Upon application and admission into the 8(a) Program, small businesses owned and controlled by disadvantaged individuals are eligible to receive technological, financial, and practical assistance, and support through preferential award of government contracts. For the past few years, the 8(a) Program was the primary preferential treatment program the DOD used to meet its 5 percent goal. <u>Id.</u> at 264.

This case arose from a Navy contract that the DOD decided to award exclusively through the 8(a) Program. The plaintiff owned a small company that would have bid on the contract but for the fact it was not a participant in the 8(a) Program. After multiple judicial proceedings the D.C. Circuit dismissed the plaintiff's action for lack of standing but granted the plaintiff's motion to enjoin the contract procurement pending the appeal of the dismissal order. The Navy cancelled the proposed procurement but the D.C. Circuit allowed the plaintiff to circumvent the mootness argument by amending its pleadings to raise a facial challenge to the 8(a) program as administered by the SBA and utilized by the DOD. The D.C. Circuit held the plaintiff had standing because of the plaintiff's inability to compete for DOD contracts reserved to 8(a) firms, the injury was traceable to the race-conscious component of the 8(a) Program, and the plaintiff's injury was imminent due to the likelihood the government would in the future try to procure another contract under the 8(a) Program for which the plaintiff was ready, willing, and able to bid. Id. at 264-65.

On remand, the plaintiff amended its complaint to challenge the constitutionality of the 8(a) Program and sought an injunction to prevent the military from awarding any contract for military simulators based upon the race of the contractors. <u>Id.</u> at 265. The district court first held that the plaintiff's complaint could be read only as a challenge to the DOD's implementation of the 8(a) Program

[pursuant to 10 U.S.C. § 2323] as opposed to a challenge to the program as a whole. <u>Id.</u> at 266. The parties agreed that the 8(a) Program uses race-conscious criteria so the district court concluded it must be analyzed under the strict scrutiny constitutional standard. The court found that in order to evaluate the government's proffered "compelling government interest," the court must consider the evidence that Congress considered at the point of authorization or reauthorization to ensure that it had a strong basis in evidence of discrimination requiring remedial action. The court cited to <u>Western States Paving</u> in support of this proposition. <u>Id.</u> The court concluded that because the DOD program was reauthorized in 2006, the court must consider the evidence before Congress in 2006.

The court cited to the recent <u>Rothe</u> decision as demonstrating that Congress considered significant evidentiary materials in its reauthorization of the DOD program in 2006, including six recently published disparity studies. The court held that because the record before it in the present case did not contain information regarding this 2006 evidence before Congress, it could not rule on the parties' Motions for Summary Judgment. The court denied both motions and directed the parties to propose future proceedings in order to supplement the record. <u>Id.</u> at 267.

3. "Federal Procurement After Adarand" (USCCR Report September, 2005)

In September of 2005, the United States Commission on Civil Rights (the "Commission") issued its report entitled "Federal Procurement After <u>Adarand</u>" setting forth its findings pertaining to federal agencies' compliance with the constitutional standard enunciated in <u>Adarand</u>. United States Commission on Civil Rights: Federal Procurement After <u>Adarand</u> (Sept. 2005), <u>available at http://www.usccr.gov</u>, citing <u>Adarand</u>, 515 U.S. at 237-38. The following is a brief summary of the report.

In 1995, the United States Supreme Court decided <u>Adarand Constructors</u>, <u>Inc. v. Pena</u>, 515 U.S. 200 (1995), which set forth the constitutional standard for evaluating race-conscious programs in federal contracting. The Commission states in its report that the Court in <u>Adarand</u> held that racial classifications imposed by federal, state and local governments are subject to strict scrutiny and the burden is upon the government entity to show that the racial classification is the least restrictive way to serve a "compelling public interest;" the government program must be narrowly tailored to meet that interest. The Court held that narrow tailoring requires, among other things, that "agencies must first consider race-neutral alternatives before using race conscious measures." [p. ix]

Scope and methodology of the Commission's report. The purpose of the Commission's study was to examine the race-neutral programs and strategies implemented by agencies to meet the requirements set forth in <u>Adarand</u>. Accordingly, the study considered the following questions:

- Do agencies seriously consider workable race-neutral alternatives, as required by <u>Adarand</u>?
- Do agencies sufficiently promote and participate in race-neutral practices such as mentor-protégé programs, outreach, and financial and technical assistance?
- Do agencies employ and disclose to each other specific best practices for consideration of raceneutral alternatives?
- How do agencies measure the effects of race-neutral programs on federal contracting?
- What race-neutral mechanisms exist to ensure government contracting is not discriminatory?

The Commission's staff conducted background research, reviewing government documents, federal procurement and economic data, federal contracting literature, and pertinent statutes, regulations and court decisions. The Commission selected seven agencies to study in depth and submitted interrogatories to assess the agencies' procurement methods. The agencies selected for evaluation procure relatively large amounts of goods and services, have high numbers of contracts with small businesses, SDBs, or HUBZone firms, or play a significant support or enforcement role: the Small Business Administration (SBA), and the Departments of Defense (DOD), Transportation (DOT), Education (DOEd), Energy (DOEn), Housing and Urban Development (HUD), and State (DOS).

The report did not evaluate existing disparity studies or assess the validity of data suggesting the persistence of discrimination. It also did not seek to identify whether, or which, aspects of the contracting process disparately affect minority-owned firms.

Findings and recommendations. The Commission concluded that "among other requirements, agencies must consider race-neutral strategies before adopting any that allow eligibility based, even in part, on race." [p. ix] The Commission further found "that federal agencies have not complied with their constitutional obligation, according to the Supreme Court, to narrowly tailor programs that use racial classifications by considering race-neutral alternatives to redress discrimination." [p. ix]

The Commission found that "agencies have largely failed to apply the Supreme Court's requirements, or [the U.S. Department of Justice's ("DOJ")] guidelines, to their contracting programs." [p. 70] The Commission found that agencies "have not seriously considered race-neutral alternatives, relying instead on SBA-run programs, without developing new initiatives or properly assessing the results of existing programs." [p. 70]

The Commission identified four elements that underlie "serious consideration" of race-neutral efforts, ensure an inclusive and fair race-neutral system, and tailor race-conscious programs to meet a documented need: "Element 1: Standards — Agencies must develop policy, procedures, and statistical standards for evaluating race-neutral alternatives; Element 2: Implementation — Agencies must develop or identify a wide range of race-neutral approaches, rather than relying on only one or two generic government-wide programs; Element 3: Evaluation — Agencies must measure the effectiveness of their chosen procurement strategies based on established empirical standards and benchmarks; Element 4: Communication — Agencies should communicate and coordinate race-neutral practices to ensure maximum efficiency and consistency government-wide." [p. xi]

The Commission found that "despite the requirements that <u>Adarand</u> imposed, federal agencies fail to consider race-neutral alternatives in the manner required by the Supreme Court's decision." [p. xiii] The Commission also concluded that "[a]gencies engage in few race-neutral strategies designed to make federal contracting more inclusive, but do not exert the effort associated with serious consideration that the Equal Protection Clause requires. Moreover, they do not integrate race-neutral strategies into a comprehensive procurement approach for small and disadvantaged businesses." [p. xiii]

Serious consideration [P. 71]

Finding: Most agencies could not demonstrate that they consider race-neutral alternatives before resorting to race-conscious programs. Due to the lack of specific guidance from the DOJ, "agencies

appear to give little thought to their legal obligations and disagree both about what the law requires and about the legal ramifications of their actions."

Recommendation: Agencies must adopt and follow guidelines to ensure consideration of race-neutral alternatives, which system could include: (1) identifying and evaluating a wide range of alternatives; (2) articulating the underlying facts that demonstrate whether race-neutral plans work; (3) collecting empirical research to evaluate success; (4) ensuring such assessments are based on current, competent and comprehensive data; (5) periodically reviewing race conscious plans to determine their continuing need; and (6) establishing causal relationships before concluding that a race-neutral plan is ineffective. Best practices could include: (1) statistical standards by which agencies would determine when to abandon race race-conscious efforts; (2) ongoing data collection, including racial and ethnic information, by which agencies would assess effectiveness; and (3) policies for reviewing what constitutes disadvantaged status and the continued necessity for strategies to increase inclusiveness.

Antidiscrimination policy and enforcement [P. 72]

Finding: The federal government lacks an appropriate framework for enforcing nondiscrimination in procurement. Limited causes of action are available to contractors and subcontractors, but the most accessible mechanisms are restricted to procedural complaints about bidding processes.

Recommendation: The enactment of legislation expressly prohibiting discrimination based on race, color, religion, sex, national origin, age, and disability, in federal contracting and procurement. Such legislation should include protections for both contractors and subcontractors and establish clear sanctions, remedies and compliance standards. Enforcement authority should be delegated to each agency with contracting capabilities.

Finding: Most agencies do not have policies or procedures to prevent discrimination in contracting. Generally, agencies are either unaware of or confused about whether federal law protects government contractors from discrimination.

Recommendation: The facilitation of agency development and implementation of civil rights enforcement policies for contracting. Agencies must establish strong enforcement systems to provide individuals a means to file and resolve complaints of discriminatory conduct. Agencies must also adopt clear compliance review standards and delegate authority for these functions to a specific, high-level component. Once agencies adopt nondiscrimination policies, they should conduct regular compliance reviews of prime and other large contract recipients, such as state and local agencies. Agencies should widely publicize complaint procedures, include them with bid solicitations, and codify them in acquisition regulations. Civil rights personnel in each agency should work with procurement officers to ensure that contractors understand their rights and responsibilities and implement additional policies upon legislative action.

Finding: Agencies generally employ systems for reviewing compliance with subcontracting goals made at the bidding stage, but do not establish norms for the number of reviews they will conduct, nor the frequency with which they will do so.

Recommendation: Good faith effort policies should be rooted in race-neutral outreach. Agencies should set standards for and carry out regular on-site audits and formal compliance reviews of SDB subcontracting plans to make determinations of contractors' good faith efforts to achieve established goals. Agencies should develop and disseminate clear regulations for what constitutes a good faith effort, specific to individual procurement goals and procedures. Agencies should also require that all prime contractors be subject to audits, and require prime contractors to demonstrate all measures taken to ensure equal opportunity for SDBs to compete, paying particular attention to contractors that have not achieved goals expressed in their offers.

Ongoing review [P. 73]

Finding: Narrow tailoring requires regular review of race-conscious programs to determine their continued necessity and to ensure that they are focused enough to serve their intended purpose. However, no agency reported policies, procedures, or statistical standards for when to use race-conscious instead of race-neutral strategies, nor had agencies established procedures to reassess presumptions of disadvantage.

Recommendation: Agencies must engage in regular, systematic reviews (perhaps biennial) of race-conscious programs, including those that presume race-based disadvantage. They should develop and document clear policies, standards and justifications for when race-conscious programs are in effect. Agencies should develop and implement standards for the quality of data they collect and use to analyze race-conscious and race-neutral programs and apply these criteria when deciding effectiveness. Agencies should also evaluate whether race-neutral alternatives could reasonably generate the same or similar outcomes, and should implement such alternatives whenever possible.

Data and measurement [P. 73-75]

Finding: Agencies have neither conducted race disparity studies nor collected empirical data to assess the effects of procurement programs on minority-owned firms.

Recommendation: Agencies should conduct regular benchmark studies which should be tailored to each agency's specific contracting needs; and the results of the studies should be used in setting procurement goals.

Finding: The current procurement data does not evaluate the effectiveness or continuing need for race-neutral and/or race-conscious programs.

Recommendation: A task force should determine what data is necessary to implement narrow tailoring and assess whether (1) race-conscious programs are still necessary, and (2) the extent to which race-neutral strategies are effective as an alternative to race-conscious programs.

Finding: Agencies do not assess the effectiveness of individual race-neutral strategies (e.g., whether contract unbundling is a successful race-neutral strategy).

Recommendation: Agencies should measure the success of race-neutral strategies independently so they can determine viability as alternatives to race-conscious measures (e.g., agencies could track the number and dollar value of contracts broken apart, firms to which smaller contracts are awarded, and the effect of such efforts on traditionally excluded firms).

Communication and collaboration [P. 75]

Finding: Agencies do not communicate effectively with each other about efforts to strengthen procurement practices (e.g., there is no exchange of race-neutral best practices).

Recommendation: Agencies should engage in regular meetings with each other to share information and best practices, coordinate outreach, and develop measurement strategies.

Outreach [P. 76]

Finding: Even though agencies engage in outreach efforts, there is little evidence that their efforts to reach small and disadvantaged businesses are successful. They do not produce planning or reporting documents on outreach activities, nor do they apply methods for tracking activities, expenditures, or the number and types of beneficiaries.

Recommendation: Widely broadcast information on the Internet and in popular media is only one of several steps necessary for a comprehensive and effective outreach program. Agencies can use a variety of formats — conferences, meetings, forums, targeted media, Internet, printed materials, ad campaigns, and public service announcements — to reach appropriate audiences. In addition, agencies should capitalize on technological capabilities, such as listservs, text messaging, audio subscription services, and new technologies associated with portable listening devices, to circulate information about contracting opportunities. Agencies should include outreach in budget and planning documents, establish goals for conducting outreach activities, track the events and diversity of the audience, and train staff in outreach strategies and skills.

Conclusion. The Commission found that 10 years after the Supreme Court's <u>Adarand</u> decision, federal agencies have largely failed to narrowly tailor their reliance on race-conscious programs and have failed to seriously consider race-neutral decisions that would effectively redress discrimination. Although some agencies employ some race-neutral strategies, the agencies fail "to engage in the basic activities that are the hallmarks of serious consideration," including program evaluation, outcomes measurement, reliable empirical research and data collection, and periodic review.

The Commission found that most federal agencies have not implemented "even the most basic raceneutral strategy to ensure equal access, i.e., the development, dissemination, and enforcement of clear, effective antidiscrimination policies. Significantly, most agencies do not provide clear recourse for contractors who are victims of discrimination or guidelines for enforcement."

One Commission member, Michael Yaki, filed an extensive Dissenting Statement to the Report. [pp. 79-170]. This Dissenting Statement by Commissioner Yaki was referred to and discussed by the district court in Rothe Development Corp. v. US DOD, 499 F.Supp.2d 775, 864-65 (W.D. Tex. August 10, 2007), reversed on appeal, Rothe, 545 F.3d 1023 (Fed.Cir 2008), (see discussion of Rothe above at Section VII, 1.). In his dissent, Commissioner Yaki criticized the Majority Opinion, including noting that his statistical data was "deleted" from the original version of the draft Majority Opinion that was received by all Commissioners. The district court in Rothe considered the data discussed by Yaki.

APPENDIX B. Utilization and Case Study Data Collection

This appendix describes utilization and case study data collection in four parts:

- A. Utilization data for construction;
- B. Utilization data for engineering-related contracts;
- C. Contract case study data; 1 and
- D. ODOT review.

A. Utilization Data for Construction

Data request. BBC initially requested the following information for all construction and professional service contracts that ODOT awarded during the study period (July 1, 2004 through June 30, 2009):

- Date of procurement;
- Name of prime contractor or vendor that performed the work;
- Vendor identification number;
- Contact information for prime contractor or vendor that performed the work (i.e., address and phone number);
- Procurement amount;
- Description of work;
- Location of the work;
- Contract goals applied to the procurement; and
- Funding source (i.e., FHWA- or state-funded).

BBC requested similar information about subcontracts that were associated with each procurement.

Construction data. ODOT maintains information about prime and subcontractors for construction contracts in two databases: SiteManager and Construction Administration System (CAS). Data was collected from both sites for the contracts awarded within the study period. ODOT changed its software systems in February 2004 from CAS to SiteManager. SiteManager includes information about procurements awarded from 2004 through 2009 and CAS includes information about procurements from 2004 through 2006.

¹ BBC uses the terms "procurement" and "contract" interchangeably throughout this report, unless otherwise noted.

Reports from SiteManager and CAS included the prime contract information the study team requested (listed above) as well as unique procurement numbers that allowed BBC to link prime contracts to related information about subcontracts and vendors.

Construction subcontract data. SiteManager and CAS included information about subcontracts for all construction contracts that ODOT awarded during the study period. Subcontractor information included subcontractor name, contract number, contract amount, DBE status and work type

Construction vendor data. ODOT provided information about construction firms that have worked or are currently working for ODOT. Vendor data included vendor name, address and phone number.

Bidders lists. Bidders lists were available for most construction contracts that ODOT awarded between July 2004 and June 2009. They included the following information about prime- and subcontractors:

- Firm name;
- Address and phone number; and
- Prequalified subindustries.

Planholders list. The planholders lists included information on all construction firms that purchased plans for purposes of bidding on contracts within the study period. The planholders lists included the following information about potential bidders:

- Name of firm;
- Contract number;
- Address and phone number; and
- Plan purchase date.

Prequalification list. The prequalification list included firms that have been prequalified with ODOT to do construction work in various subindustries. The prequalification list included the following information about prime contractors:

- Name of firm;
- Prequalification limit; and
- Prequalified subindustries.

B. Utilization Data for Engineering-related Contracts

Engineering-related contract data. ODOT maintains information for engineering-related prime contracts in several databases:

- **Consultant amount table and EC tables,** capture information for engineering-related contracts that ODOT manages.
- Cross-town contract database, covers only those projects associated with the cross-town project.
- The Local government database, includes contract information for federally-funded engineering-related contracts that local governments in Oklahoma manage.

The foregoing data sources include prime contract information for contracts that ODOT awarded from July 1, 2004 through June 30, 2009.

Engineering-related subcontract data. Comprehensive subcontractor information was not available for engineering-related contracts that ODOT awarded during the study period. The study team collected subcontract information by contacting prime contractors for contracts valued at \$100,000 or more. The study team requested the following information for each subcontract:

- Subcontractor name;
- Address and phone number;
- Award amount; and
- Amount paid as of June 30, 2009.

The study team collected subcontract information accounting for 92 percent of engineering-related contracts based on dollars.

Engineering vendor data. ODOT provided information about professional service firms that performed are currently performing work for ODOT. Vendor information included vendor name and contact information.

C. Contract Case Study Data

BBC conducted a case study analysis of the bid process for a sample of construction and engineering-related contracts that ODOT awarded during the study period. The study team obtained bid and other information from procurement that ODOT maintains.

Sampling method. BBC examined contracts from the entire study period as part of the case study analysis. The study team collected bid information for 61 randomly-selected construction and 53 engineering-related contracts, stratified by procurement area. The sample included contracts ranging in value from \$25,000 to more than \$20 million.

Case study documents. For each procurement in the case study sample, BBC and TMS attempted to collect information about any firm that bid on or submitted a proposal for the work — including

bid amounts and evaluation scores when available. The study team also collected information on the contract award. Several documents were relevant to the analysis. These documents differed for construction and engineering-related contracts.

D. Agency review

After BBC collected contract and vendor data for construction and engineering, the study team compiled the information in tables for ODOT review. BBC used ODOT feedback to finalize contract and vendor data.

APPENDIX C. Availability Survey

This appendix describes study team steps to analyzing MBE/WBE availability for transportation construction and engineering work in Oklahoma. It expands on the analysis presented in Section IV by explaining:

- A. Overall approach;
- B. Development of list of business establishments;
- C. Development of questionnaire;
- D. Interview execution and performance; and
- E. Additional Considerations.

A. Overall Approach

BBC contracted with Customer Research International (CRI) to conduct telephone interviews with business establishments in Oklahoma. The business establishments interviewed were those identified in a Dun & Bradstreet (D&B) database as doing work in fields closely related to transportation construction and engineering. Business establishments with locations in Oklahoma were interviewed.

The study team attempted to contact every listing in relevant industry codes rather than drawing a sample of listings from the D&B database. CRI attempted to reach 4,056 business listings. The study team successfully contacted 2,145 business establishments, about 74 percent of the establishments with valid phone listings (1,141 listings were non-working, duplicate or wrong numbers). About 1,000 establishments that were successfully contacted indicated they were not interested in participating in a discussion of availability for ODOT work. More than 1,000 firms completed interviews about firm characteristics, their interest and qualifications for ODOT work, and other topics. After screening for qualifications, interest in future transportation construction and engineering work, and other factors, BBC identified 542 firms as available for ODOT construction and engineering-related work.

B. Development of List of Business Establishments

BBC developed a list of business establishments to contact for availability interviews based on a D&B database of establishments with locations in Oklahoma. The study team determined business specializations that accounted for most transportation construction and engineering work. BBC then identified the 8-digit D&B industry codes best corresponding to that work and collected information about Oklahoma firms that D&B listed as having their primary lines of business within those industries.

The study team did not expect every firm in these lines of business to be available for transportation construction or engineering work. In some subindustries, BBC anticipated that relatively few firms would perform that type of work. In the same vein, the study team did not design the research effort so that every firm possibly performing transportation construction or engineering-related work would be called as part of the interviews. To do so would have required including subindustries that are only marginally related to transportation construction and engineering. In addition, some firms within the core lines of work encompassed by the interviews were either missing from the D&B database or might not have responded to the interview effort. Finally, only firms with Oklahoma locations were included in the interviews. For these reasons, the interviews do not represent a complete census of all firms possibly available for transportation contracting work in Oklahoma. The study team's goal was to develop unbiased estimates of the relative availability of MBE/WBEs among firms doing business in Oklahoma within the lines of work principally involved in transportation contracting. Although the interviews are not a complete census, it does approach one when considering statistical reliability of results, as explained further in this appendix.

Identifying the relevant subindustries for Oklahoma transportation contracting. BBC determined the types of firms involved in ODOT transportation construction and engineering services by reviewing the dollars of ODOT prime contracts and subcontracts going to different types of businesses. Appendix B describes the study team's collection and analysis of ODOT contract and subcontract data for the study period.

D&B has developed 8-digit industry codes that provide more precise definitions of firm specializations than the 4-digit SIC codes or the NAICS codes that have been prepared by the federal government. Figure C-1 on the following page lists industry codes for construction and engineering-related firms that were contacted as part of the telephone interview process.

Determining list of establishments to be contacted. Each Oklahoma business establishment within relevant subindustries for which D&B had a phone number was included in the list purchased from D&B. There was no "sampling" of business establishments from the D&B list. BBC purchased information on 4,056 business establishments to be contacted as part of the availability interviews. This number included 3,430 construction-related establishments and 626 engineering-related establishments.

Because D&B organizes its database by "business establishment," not by "firm," BBC purchased the business listings in that fashion. Therefore, multiple Oklahoma locations for a single firm were obtained in the list of establishments to be called. The study team attempted to contact each establishment by telephone. (BBC's methods for consolidating information for multiple establishments into a single record for a firm are described later in this appendix.)

Figure C-1.
Transportation contracting fields included in interviews

Industry code	Industry description	Industry code	Industry description
Construction			
Highway and tunnel construction		Excavation, grading and erosion control	
1611-0000	Highway and street construction	0181-9902	Sod farms
1611-0200	Surfacing and paving	0782-9903	Landscape contractors
1611-0202	Concrete construction: roads, highways, sidewalks, etc.	1629-0400	Land preparation construction
1611-0204	Highway and street paving contractor	1629-0401	Land leveling
1611-0205	Resurfacing contractor	1629-9902	Earthmoving contractor
1611-0207	Gravel or dirt road construction	1629-9906	Trenching contractor
1611-9901	General contractor, highway and street construction	1794-0000	Excavation work
1771-0000	Concrete work	1794-9901	Excavation and grading, building construction
1771-0200	Curb and sidewalk contractors	1795-9901	Concrete breaking for streets and highways
1771-0201	Curb construction	1795-9902	Demolition, buildings and other structures
1771-0301	Blacktop (asphalt) work		
		Bridge construct	ion and repair
Drainage structu	res and utilities	1622-0000	Bridge, tunnel, and elevated highway construction
1623-0000	Water, sewer, and utility lines	1622-9901	Bridge construction
1623-0201	Cable laying construction	1622-9902	Highway construction, elevated
1623-0300	Water and sewer line construction		
1623-0302	Sewer line construction	Painting and striping	
1623-0303	Water main construction	1721-0300	Industrial painting
1623-9906	Underground utilities contractor	1721-0302	Bridge painting
Fencing, guardra	il and barriers	Construction sup	pplies
1611-0101	Guardrail construction, highways	2951-0000	Asphalt paving mixtures and blocks
1799-9912	Fence construction	2951-0201	Asphalt and asphaltic paving mixtures (not from refineries)
		2952-0000	Asphalt felts and coatings
Trucking and ha	uling		
4212-0000	Local trucking, without storage	Machinery and equipment	
4213-0000	Trucking, except local	5082-0300	General construction machinery and equipment
4213-9903	Contract haulers	7359-0000	Equipment rental and leasing, nec
Electrical, lightin	g and signals	Traffic control	
1611-0102	Highway and street sign installation	7359-9912	Work zone traffic equipment (flags, cones, barrels, etc.)
3669-0206	Traffic signals, electric		
	5 .	Other construction supplies	
Other construction	on services	1442-0000	Construction sand and gravel
1629-0100	Dams, waterways, docks, and other marine construction		-
1629-0103	Dam construction		
1629-0111	Pier construction		
1741-0102	Retaining wall construction		
Engineering and	other professional services		
Engineering serv	ices	Consulting and 1	research
8711-0000	Engineering services	8731-0302	Environmental research
8711-0400	Construction and civil engineering	8748-0204	Traffic consultant
8711-0402	Civil engineering		
8711-9903	Consulting engineer	Surveying and mapping services	
		8713-0000	Surveying services

Note: 8-digit SIC codes were developed by Dun & Bradstreet.

Source: BBC Research and Consulting from Dun & Bradstreet Marketplace, 2009-2010.

C. Development of Questionnaire

The study team drafted a telephone interview guide to collect business information from transportation construction and engineering firms. Before the interview guide was used in the field, ODOT staff reviewed the questionnaire. BBC has used similar questionnaires in other availability analyses for state departments of transportation. The basic interview document for construction firms is provided in Figure C-4 at the end of this appendix. The questionnaire was slightly modified for certain groups of firms based on line of work in order to use the terms commonly employed in those fields. For example, the words "prime consultant" and "subconsultant" were substituted for "prime contractor" and "subcontractor" when interviewing engineering-related firms.

A fax/email version of the questionnaire was also developed for firms that were initially contacted by telephone but that preferred to complete the questionnaire in hard copy format. Those firms returned completed questionnaires to BBC via fax or e-mail.

Interview structure. The questionnaires included the following sections. Note that each section was asked of all firms. Interviewers did not know ownership status when calling a firm.

Identification of purpose. The interviews began by identifying the Oklahoma Department of Transportation as the survey sponsor and describing the purpose of the study ("developing a list of companies involved in construction, maintenance or design work on a wide variety of road, highway and other transportation projects").

Verification of correct firm name. The interviewer verified that he or she had reached the correct business, and if not, inquired about the correct contact information for that business. When the firm name was not correct, interviewers asked if the respondent knew how to contact the company. The BBC study team followed up with the desired company based on the new contact information (see areas "X" and "Y" of the Availability Questionnaire in Figure C-4).

Performance of transportation construction or engineering work. Firms were asked, "First, I want to confirm that your firm does work or provides materials related to transportation construction, maintenance or design of roads and highways. Is this correct?" Interviewers continued with firms responding "yes" to this question (Question A1). BBC instructed interviewers that "doing work" included trying to sell that work.

Verification of for-profit business status. The interviewer also asked whether the organization was a for-profit business as opposed to a government or not-for-profit entity (Question A2). Interviewers continued with firms responding "yes" to this question. (Tribally-owned businesses were treated as for-profit businesses for purposes of the availability analysis.)

Confirmation of main line of business. Construction firms were asked to identify types of work they perform from a list developed based on ODOT's prequalification categories (Question A3). They also confirmed their primary line of business according to D&B (Question A4). Firms seeking to change or clarify this description were then asked to identify their primary line of business (Question A4b). (After the interview was complete, BBC coded the new information on primary line of business into appropriate industry codes.)

Sole location, or multiple locations. Because the study team interviewed business establishments, business owners and managers were asked if they had other locations in Oklahoma (Question A5). They were also asked if the establishment was an affiliate or subsidiary of another firm (Question A9). (A discussion of how BBC consolidated this information into a single response for a firm is presented later in this appendix.)

Past bids or work with ODOT, local governments and the private sector. The interview inquired about bids for or work on past state, local government and private sector transportation projects. This area of questions also asked whether the firm had bid or worked as a prime contractor or as a subcontractor or supplier (Questions B1–B12).

Qualifications and interest in future transportation work. Firm representatives were asked about their qualifications and interest in future transportation work. The interview questions asked whether they were qualified and interested in work for ODOT or local governments. Separate questions asked about qualifications and interest in this work as a prime contractor and/or as a subcontractor (Questions B13–B14).

Geographic areas. Interviewers asked a series of questions to identify the geographic areas in which the firm could work. These geographic areas included counties and regions of the state that correspond to ODOT divisions (Question C1a – C1e).

Year firm established. Interviewers asked firms to identify the approximate year that the firm was established (Question D1).

Largest contracts. Interviewers asked firms to identify the largest transportation-related prime contract or subcontract they had been awarded in Oklahoma in the past five years. They were also asked about the largest prime contract or subcontract that they had bid on in Oklahoma in the past five years (Questions D2–D4).

Ownership. Firms were asked whether they were at least 51 percent owned and controlled by women and/or minorities (Questions E1–E3). If firms indicated that they were minority-owned, they were also asked about the race/ethnicity of ownership.

Business background. Several questions collected information on 2008 revenues and number of employees (Questions F1–F6). For firms with multiple establishments, the interview also asked about revenue and employee numbers for all locations.

CRI asked a series of questions concerning general insights on the marketplace and ODOT contracting practices (Question G1a – G1m). This set of questions was introduced with the following statement: "Finally, we're interested in whether your company has experienced barriers or difficulties associated with starting or expanding a business in your industry or with obtaining work. Think about your experiences within the past five years as we ask you these questions."

The interview also included an open-ended question about the Oklahoma marketplace (Question G2): "Finally, we're asking for general insights on starting and expanding a business in your field or winning work as a prime or subcontractor. Do you have any thoughts to offer on these topics?"

Contact information. The interview concluded by collecting complete contact information for the establishment (Questions H1–H6).

D. Interview Execution and Performance

BBC contracted with Customer Research International (CRI) to conduct the telephone interviews. BBC routinely holds planning sessions with CRI executives and training sessions with CRI interviewers as part of BBC's ongoing relationship with the firm. CRI programmed and conducted the interviews and provided daily reports on results. BBC instructed CRI to make at least five attempts to reach a person at each phone number. This design is intentionally persistent to minimize non-response.

BBC instructed CRI staff to identify and interview an available company representative such as the owner, manager, chief financial officer or other key official who could answer questions about the company's line of business, past contracts, financial and employment figures, interest in work with various clients, and ownership status. The interviews were conducted from December 2009 through January 2010.

Performance. The interview process began with a very large number of D&B business listings for organizations in Oklahoma in certain lines of work related to transportation construction and engineering. At the end of the availability analysis process, firms reporting that they are available for, had bid on, or had performed transportation construction or engineering work were included in the database used for the availability analysis.

Valid business listings. Some of the business listings purchased from D&B were:

- Duplicate numbers (28 listings);
- Non-working phone numbers (925 listings); or
- Wrong numbers for the desired businesses (188 listings that could not be reached through follow-up calls).

Figure C-2, on the following page, shows how the beginning set of 4,056 listings was reduced to 2,915 because of these factors. Some non-working phone numbers and some wrong numbers for the desired businesses reflect firms going out of business or changing their names and phone numbers between the time that D&B listed them in its database and the time that the study team attempted to contact them.

Figure C-2 also shows the final disposition of the 2,915 business establishments that CRI attempted to contact:

- Slightly more than 10 percent of business establishments could not be reached after a minimum of five phone calls (298 establishments). Call-backs to these business establishments were made at different times of day and different days of the week in order to maximize response.
- About 14 percent of business establishments could not provide a staff member to complete the interview after a minimum of five phone calls (393 establishments).

- Interviews were only conducted in English. Less than 1 percent of business establishments could not communicate with the interviewer due to language barriers (10 establishments).
- Slightly more than 2 percent of business establishments asked the study team to send the questionnaire via fax or e-mail but did not successfully obtain the fax or e-mail (after multiple attempts) or received the questionnaire but did not return a completed interview to BBC (69 establishments).

In sum, BBC successfully contacted 2,145 business establishments, or about 74 percent of the business establishments with valid phone listings.

Figure C-2.
Disposition of attempts to interview D&B business listings

Note:

* After multiple attempts to complete interview.

Source:

BBC Research & Consulting from 2009–2010 Availability Interviews.

	Number of firms	Percent of business listings
Beginning list	4,056	
Less duplicate numbers	28	
Less non-working phone numbers	925	
Less wrong number/business	188	
Unique business listings with working phone numbers	2,915	
Less no answer*	298	10.2 %
Less could not reach responsible staff member	393	13.5
Less language barrier	10	0.3
Less unreturned fax/email	69	2.4
Establishments successfully contacted	2,145	73.6 %

Establishments not interested in discussing availability for ODOT work. Figure C-3 shows that among the 2,145 business establishments successfully contacted, 1,061 establishments were not interested in discussing availability for ODOT work. Many of these firms indicated that they did not perform transportation work and were not interested in conducting the interview. More than 50 percent of the business firms successfully contacted completed interviews about firm characteristics (1,084 establishments).

Firms that report being available for transportation construction and engineering work. Among the business establishments that completed interviews, only a portion was deemed available for any type of ODOT or local government transportation construction and engineering work, as explained below:

- Eighteen individual establishments of multi-location firms completed the interview. Prior to analyzing results, BBC collapsed responses from these multiple establishments into a single response (described below). This removed nine establishments from the availability analysis (about 1 percent of total completed interviews).
- Slightly more than 30 percent of the firms that completed an interview indicated they did not perform transportation construction, maintenance or design work (335 establishments). The interview ended when a business owner or manager reported that the business did not do that type of work.

- About 1 percent of interviewed establishments indicated that they were involved in transportation construction, maintenance or design work but reported main lines of work that were well outside the scope of the availability analysis (11 establishments). For example, some firms identified by D&B as highway construction or concrete firms reported in the interview that they did transportation construction-related work, but that their primary line of business was single family homebuilding or other specialties outside the scope of the study. CRI completed the full interview with these firms. Prior to analyzing results, BBC excluded them from the final data set.
- About 1 percent of the interviewed establishments were excluded because they were an organization other than a for-profit business (16 establishments). Non-profit and public sector agencies were not to be included in the availability analysis as the study focuses on for-profit firms (including tribal organizations). The interview ended when a respondent reported that the establishment was something other than a for-profit business.
- One hundred and four firms who were interested in future projects in Oklahoma were not counted as firms available for ODOT and local agency transportation projects because they had not bid or received awards for similar projects in Oklahoma within the past five years. BBC included responses from these firms when analyzing marketplace conditions (see Section III) but not when calculating availability for ODOT contracts.
- Seventeen additional firms were not counted as firms available for ODOT or local agency transportation projects because they said they were not interested in either prime contracting or subcontracting opportunities on such projects. Responses from these firms were included when analyzing marketplace conditions but not when calculating availability for ODOT work.

After these exclusions, the interview effort produced a database of 542 firms for the availability analysis (see Figure C-3).

Figure C-3.
Screening of completed business telephone interviews for possible inclusion in the availability analysis

Source:

BBC Research & Consulting from 2009-2010 Availability Interviews.

	Number of firms
Establishments successfully contacted	2,145
Less establishments not interested in discussing availability for ODOT work	1,061
Establishments that completed interviews about firm characteristics	1,084
Less multiple establishments	9
Less no road or highway-related work	335
Less line of work outside scope	11
Less not a business	16
Less no past bid/award	154
Less no interest in future work	17
Firms available for Oklahoma DOT work	542

Study team identification and coding of responses from multi-location firms. Multiple responses from different establishments operating under the same firm name were combined into a single, summary case according to the following rules:

- If any of the establishments reported bidding or working on a contract within a particular sector, the firm summary for that variable was coded to an affirmative response for the corresponding sector;
- The types of work (prime contractor, subcontractor, supplier or trucker) that establishments reported were summed to a single variable, again corresponding to the appropriate sector; and
- If any establishment said that it was interested and able to work within one of the five geographic regions (see part C of the interview instrument in Figure C-4), the firm summary reflected that geographic scope.

Except when there was a large discrepancy among the individual responses in a set of establishments' self-reported founding dates, BBC used the median founding date provided by the multiple establishments. The firm summary variables for contract sizes and firm revenue are equivalent to the largest dollar amounts indicated by any of its establishments. The summary number of firm employees in Oklahoma is equal to the most common or the mean response of the multiple establishments. Finally, firms with multiple locations were re-coded as woman- or minority-owned, DBE, or certified small businesses if the majority of duplicate establishments indicated such status.

E. Additional Considerations

The study team explored several possible limitations in its approach to estimating relative availability. These include:

- Assessing relative MBE/WBE availability and not providing a count of all firms available for transportation construction and engineering-related work;
- Use of telephone interviews of firms as an approach to determining relative MBE/WBE availability for a state DOT's contracts;
- Use of D&B as the sample frame;
- Selection of specific industry;
- Non-response bias; and
- Reliability of answers to interview questions.

Not providing a count of all firms available for ODOT work. The purpose of the availability interviews is to estimate the *percentage* of firms available for transportation construction and engineering work that are minority- and women-owned and controlled (i.e., "relative" MBE/WBE availability). The interviews provide such information. The interviews do not provide a comprehensive listing of every firm available for transportation work and should not be used as such.

The interview approach of measuring relative availability has been approved by federal courts (see, for example, the Seventh Circuit decision on *Northern Contracting*) when considering state implementation of the Federal DBE Program. Use of a survey is recommended as an approach to measuring availability in the USDOT guidance on goal-setting.

Use of telephone interviews. USDOT guidance for determining relative availability of DBEs mentions simply dividing the number of firms in an agency's DBE directory by the total firms in the marketplace, as reported in U.S. Census data. As another option, the USDOT suggests using a list of pre-qualified firms or a bidders list to analyze the relative availability of DBEs for an agency's contracts and subcontracts.

There are several reasons the study team rejected these approaches:

- Dividing a simple count of certified DBEs by a U.S. Census count of total firms does not provide the data on firm characteristics the study team desired for this disparity study. For example, the interviews provide additional data on individual firms' qualifications and interest in transportation work.
- As mentioned previously, ODOT does not maintain a comprehensive pre-qualification list that applies to subcontractors and prime consultants for engineering-related contracts.
- ODOT has a contact list for engineering-related firms, but no such list for construction. Firms
 are not required to be on the ODOT list to compete for Department prime contracts and
 subcontracts.
- A "custom census" approach to measuring availability that starts with D&B data has been positively reviewed by the court cases involving DBE goal setting for state departments of transportation (see, for example, *Northern Contracting* in Appendix C).

The methodology applied in the ODOT study takes this "custom census" approach and adds several layers of refinement in more precisely measuring MBE/WBE availability.

For all of these reasons, the study team selected use of telephone interviews as a step toward analyzing MBE/WBE availability.

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N. Contracting, Inc. v. Illinois DOT, 473 F.3d 715 (7th Cir. 2007)

² USDOT. Tips for Goals Setting in the Disadvantaged Business Enterprise (DBE) Program (http://osdbu.dot.gov/?TabId=133)

Use of D&B list. Dun & Bradstreet provides the most comprehensive private database of business listings in the United States. Even so, this database does not include all establishments operating in Oklahoma:

- New firms. There can be a lag between formation of a new business and inclusion in the database. This means that the newest firms are underrepresented in the sample frame. Based on the firms successfully interviewed, newly formed firms are more likely than older firms to be minority- or women-owned, which suggests that MBEs and WBEs might be underrepresented in the final database of interviewed firms.
- Home-based businesses. The D&B database is more likely to miss a business working out of the home than a firm with a distinct business office. Small, home-based firms are more likely than large firms to be minority- or women-owned, which again suggests that MBEs and WBEs might be underrepresented in the final availability data set.

Selection of specific industry. Defining an industry based on specific industry codes (e.g., SIC, NAICS or D&B industry codes) is a standard step when analyzing an economic sector. Government and private sector economic data are typically organized according to these industry codes. As with any such research, there are limitations when choosing the specific D&B codes to define sets of establishments to be interviewed. For example, it was not possible for BBC to include all industries possibly related to transportation construction and engineering without interviewing nearly every industry in Oklahoma.

A further limitation to the use of D&B codes to classify businesses, or any other work type classification method, is that some codes are imprecise and overlap with other business specialties. Even though BBC used D&B's own 8-digit industry codes, D&B does not maintain a detailed 8-digit code for each firm in its database. In addition, businesses often span several types of work, even at the 4-digit level of specificity. This overlap makes classifying businesses into a single line of business difficult and imprecise. When firm owners and managers were asked to identify primary lines of business, they often gave broad answers. For these reasons, BBC collapsed many of the industry codes into broader work categories in the final database of firms available for transportation-related work.

Non-response bias. Analysis of non-response bias considers whether firms not successfully interviewed are different from those successfully interviewed and included in the final data set. There are opportunities for non-response bias in any primary research effort. The study team considered the potential for non-response bias due to:

- Research sponsorship;
- Work specializations; and
- Language barriers.

Research sponsorship and introduction. Interviewers introduced themselves by identifying ODOT as the interview sponsor in order to encourage firms that performed transportation construction and engineering work to participate in the interview. Firms would be less likely to answer somewhat sensitive business questions asked by an interviewer that was unable to identify the sponsor of the interview. In fact, some firms asked to check with ODOT to verify its sponsorship prior to participating in the interview.

Analysis of interview refusal rates suggests that sponsorship had an overwhelmingly positive effect on response rates. Only 4 percent of business listings potentially contacted refused to conduct the interview.

Work specializations. Businesses in highly-mobile fields, such as trucking, may be more difficult to reach than firms more likely to work out of a fixed office (e.g., engineering firms). This suggests that response rates will differ by business specialization.

If all interviewed firms were simply counted to determine relative MBE/WBE availability, this would lead to estimates that relied too heavily on fields that could be easily contacted by telephone. This potential non-response bias is minimal in this study because the availability analysis compares firms within particular work fields before determining an MBE/WBE availability figure. In other words, the potential for trucking firms to be less likely to complete an interview is less important because the number of MBE/WBE trucking firms completing interviews is compared with total number of trucking firms, not all firms across all fields.

Language barriers. ODOT contracting documents are in English and not other languages. The study team made the decision to only include businesses able to complete the interview in English in the availability analysis so to remove language barriers as a potential explanation for any differences in outcomes observed between MBE/WBEs and majority-owned firms.

Individuals who could not communicate in English well enough to complete the interview and could not locate another individual to answer interview questions in English were not captured in the availability analysis. Choosing to conduct the study in English and not translate it into other languages may have an effect on the relative number of Hispanic American-owned firms that completed the interviews.

Response reliability. Firm owners and managers were asked questions that may be difficult to answer, including firm revenues and employment. For this reason, the study team prompted them with D&B information for their establishment and asked them to confirm that information or provide more accurate estimates. Further, respondents were typically not asked to give absolute figures for difficult questions such as firm revenues. Rather, they were given ranges of dollar figures or employment levels.

BBC explored reliability by analyzing consistency of interview responses for the firm revenues and firm employment questions. BBC found interview responses to these difficult questions to be internally consistent. Firms with smaller employee numbers reported revenues consistent with their employment levels.

Summary

"Custom census" approaches to availability that begin with D&B data have been reviewed positively by federal courts. The study team's methodology for analyzing MBE/WBE availability takes the previous custom census approach as a starting point and added several layers of additional screening when determining firms available for transportation construction and engineering-related work.

The study team attempted to complete interviews with all Oklahoma firms that according to D&B to have a primary line of business within transportation construction and engineering-related industry codes. (There was no "sampling" from the sample frame in preparing the list of firms to be interviewed.) The study team attempted to contact 4,056 business listings, about 1,200 of which were found to be invalid listings. A relatively high proportion of the remaining establishments were successfully contacted, and over 1,000 business establishments completed availability interviews.

BBC examined several potential sources of non-response bias. It is possible that MBEs and WBEs were somewhat under-represented in the final database of available firms. However, BBC concludes that this potential under-representation of MBE/WBEs does not significantly affect the analyses.

Figure C-4. Interview Instrument [Construction]

Hello. My name is [interviewer name] from CRI. We are calling on behalf of the Oklahoma Department of Transportation (ODOT).

We are developing a list of companies involved in construction, maintenance, and design on a wide range of road, highway and other transportation projects. With whom can I speak to get the information we need from your firm?

[AFTER REACHING THE OWNER OR AN APPROPRIATELY SENIOR STAFF MEMBER, THE INTERVIEWER SHOULD RE-INTRODUCE THE PURPOSE OF THE SURVEY AND BEGIN WITH QUESTIONS]

[IF ASKED, THE INFORMATION DEVELOPED IN THESE INTERVIEWS WILL ADD TO ODOT'S EXISTING DATA ON COMPANIES INTERESTED IN WORKING WITH THE DEPARTMENT]

X1. I have a few basic questions about your company and the type of work you do. Can you confirm that this is [firm name]?

1=RIGHT COMPANY - SKIP TO A1

2=NOT RIGHT COMPANY - SKIP TO Y1

3=REFUSE TO GIVE INFORMATION – TERMINATE

Y1. Can you give me any information about [firm name]?

1=Yes, same owner doing business under a different name – SKIP TO Y4

2=Yes, can give information about named company – SKIP TO Y2

3=Company bought/sold/changed ownership – SKIP TO Y4

4=No. does not have information – TERMINATE

5=Refused to give information – TERMINATE

Y1. ENTER NEW NAME

1=VERBATIM

Y2. Can you give me the phone number of [firm name]?

(ENTER UPDATED PHONE OF NAMED COMPANY)

1=VERBATIM

Y3. Can you give me the complete address or city for [firm name]?

(NOTE TO INTERVIEWER - RECORD IN THE FOLLOWING FORMAT:

- . STREET ADDRESS
- . CITY
- . STATE
- . ZIP)
- 1=VERBATIM

Y4. And what is the new name of the business that used to be [firm name]?

(ENTER UPDATED NAME)

1=VERBATIM

Y5. Can you give me the name of the owner or manager of the new business?

(ENTER UPDATED NAME)

1=VERBATIM

Y6. Can I have a telephone number for them?

(ENTER UPDATED PHONE)

1=VERBATIM

Y7. Can you give me the complete address or city for [new firm name]?

1=VERBATIM

Y8. Do you work for this new company?

1=YES - CONTINUE

2=NO - TERMINATE

A1. First, I want to confirm that your firm does work or provides materials related to construction, maintenance or design of roads and highways. Is this correct?

(NOTE TO INTERVIEWER – INCLUDES ANY WORK RELATED TO CONSTRUCTION, MAINTAINENCE OR DESIGN SUCH AS BUILDING AND PARKING FACILITIES, PAVING AND CONCRETE, TUNNELS, BRIDGES AND ROADS. IT ALSO INCLUDES DESIGN, ENGINEERING, PLANNING, ENVIRONMENTAL ASSESMENT OR RELATED PROFESSIONAL SERVICES.)

(NOTE TO INTERVIEWER - INCLUDES HAVING DONE WORK, TRYING TO SELL THIS WORK, OR PROVIDING MATERIALS)

1=Yes

2=No - TERMINATE

A2. Let me confirm that [firm name / new firm name] is a business, as opposed to a non-profit organization, a foundation or a government office. Is that correct?

1=Yes, a business

2=A tribally-owned organization

3=No, other – TERMINATE

(NOTE TO INTERVIEWER – THE SURVEY SHOULD CONTINUE IF THE ENTITY IS A TRIBALLY-OWNED CONCERN)

A3. Next, we're interested in the types of work that [firm name / new firm name] performs. Does your firm do: [READ, MULITPUNCH]

1=Grading

2=Drainage structures

3= Paving and coldmilling

4=Bridge construction and repair

5=Fencing, guardrail and barriers

6=Painting and striping

7=Traffic control

8=Electrical, lighting and signals

91=Any other types? (Record verbatim)

92=(Other2 – Verbatim)

```
93=(Other3 - Verbatim)
```

A4a. Let me also confirm what your primary line of business is. The information we have from Dun & Bradstreet indicates that your main line of business is [SIC Code description]. Is this correct?

(NOTE TO INTERVIEWER - IF ASKED, DUN & BRADSTREET OR D&B, IS A COMPANY THAT COMPILES BUSINESS INFORMATION THROUGHOUT THE COUNTRY)

1=Yes – SKIP TO A5

2=No

98= (DON'T KNOW)

99= (REFUSED)

A4b. What would you say is the main line of business at [firm name / new firm name]?

(ENTER VERBATIM RESPONSE)

1=VERBATIM

A5. Is this the sole location for your business, or do you have offices in other locations?

1=Sole location – SKIP TO A8

2=Have other locations

98= (DON'T KNOW)

99= (REFUSED)

A8. Is your company a subsidiary or affiliate of another firm?

1=Independent – SKIP TO B1

2=Subsidiary or affiliate of another firm

98= (DON'T KNOW)

99= (REFUSED)

A9. What is the name of your parent company?

1=ENTER NAME

98= (DON'T KNOW)

99= (REFUSED)

A9. ENTER NAME OF PARENT COMPANY

1=VERBATIM

B1. Next, I have a few questions about your company's role in construction, maintenance or design work related to roads and highways. During the past five years, has your company submitted [a bid || qualifications || a proposal] or a price quote to any part of a state or local government project in Oklahoma?

B2. Were those [bids || qualifications || proposals] or price quotes to work as [a prime contractor, a subcontractor, or as a supplier || a prime consultant or as a subconsultant]?

1=Prime contractor/consultant	10=(Supplier and Trucker)
2=Subcontractor/subconsultant	11=(Prime and Trucker)
3=Supplier (or manufacturer)	12=(Sub and Trucker)
4=Prime and Sub	13= (Prime, Supplier, and Trucker)
5=Sub and Supplier	14= (Sub, Supplier, and Trucker)
6=Prime and Supplier	15= (Prime, Sub, and Trucker)
7=Prime, Sub, and Supplier	16= (Prime, Sub, Supplier, Trucker)
8=Trucker	98= (DON'T KNOW)
	99= (REFUSED)

B3. During the past five years, has your company received an award for work [as a prime contractor or as a subcontractor || as a prime consultant or as a subconsultant] to any part of a state or local government project in Oklahoma?

B4. Were those awards to work as [a prime contractor, a subcontractor, or as a supplier || a prime consultant or as a subconsultant]?

1=Prime contractor/consultant
10= (Supplier and Trucker)
2=Subcontractor/subconsultant
11= (Prime and Trucker)
3=Supplier (or manufacturer)
12= (Sub and Trucker)
4=Prime and Sub
13= (Prime, Supplier, and Trucker)

4=Prime and Sub
13= (Prime, Supplier, and Trucker)
5=Sub and Supplier
14= (Sub, Supplier, and Trucker)
6=Prime and Supplier
15= (Prime, Sub, and Trucker)

7=Prime, Sub, and Supplier 16= (Prime, Sub, Supplier, Trucker)

8=Trucker 98= (DON'T KNOW)

99= (REFUSED)

B9. Again thinking about construction, maintenance or design work related to roads and highways during the past five years, has your company submitted [a bid || qualifications, a proposal] or a price quote for any part of a private sector contract in Oklahoma?

1=Yes 2=No - SKIP TO B11 98= (DON'T KNOW) - SKIP TO B11 99= (REFUSED) - SKIP TO B11

B10. Were those [bids || proposals] or price quotes to work as [a prime contractor, a subcontractor, or as a supplier || a prime consultant or as a subconsultant]?

1=Prime contractor/consultant 10= (Supplier and Trucker)
2=Subcontractor/consultant 11= (Prime and Trucker)
3=Supplier (or manufacturer) 12= (Sub and Trucker)

4=Prime and Sub
13= (Prime, Supplier, and Trucker)
5=Sub and Supplier
14= (Sub, Supplier, and Trucker)
6=Prime and Supplier
15= (Prime, Sub, and Trucker)

7=Prime, Sub, and Supplier 16= (Prime, Sub, Supplier, Trucker)

8=Trucker 98= (DON'T KNOW)

99= (REFUSED)

B11. During the past five years, has your company received an award for work as a [prime contractor or as a subcontractor || prime consultant or as a subconsultant] for any part of a private sector contract in Oklahoma?

```
1=Yes

2=No - SKIP TO B13

98= (DON'T KNOW) - SKIP TO B13

99= (REFUSED) - SKIP TO B13
```

B12 Were those awards to work as [a prime contractor, a subcontractor, or as a supplier? || a prime consultant or as a subconsultant?]

1=Prime contractor/consultant	10= (Supplier and Trucker)
2=Subcontractor/subconsultant	11= (Prime and Trucker)
3=Supplier (or manufacturer)	12= (Sub and Trucker)
4=Prime and Sub	13= (Prime, Supplier, and Trucker)
5=Sub and Supplier	14= (Sub, Supplier, and Trucker)
6=Prime and Supplier	15= (Prime, Sub, and Trucker)
7=Prime, Sub, and Supplier	16= (Prime, Sub, Supplier, Trucker)
8=Trucker	98= (DON'T KNOW)
	99= (REFUSED)

B13. Is your company qualified and interested in working with the Oklahoma Department of Transportation or local governments as a [prime contractor || prime consultant]?

```
1=Yes
4=No
98= (DON'T KNOW)
99= (REFUSED)
```

B14. Is your company qualified and interested in working with the Oklahoma Department of Transportation or local governments as a [subcontractor or supplier || subconsultant]?

```
1=Yes
4=No
98= (DON'T KNOW)
99= (REFUSED
```

C1. I now want to ask you about the geographic area your company serves.

C1a. Could your company do work or serve customers in the Tulsa area and other parts of Northeast Oklahoma?

NORTHEAST OKLAHOMA INCLUDES THE OSAGE, PAWNEE, CREEK, TULSA, CRAIG, MUSKEGEE, SEQUOYAH AND MCINTOSH AREAS, (ODOT Divisions 1 and 8).

```
1=Yes
2=No
98= (DON'T KNOW)
99= (REFUSED)
```

C1b. Could your company do work or serve customers in Southeast Oklahoma?

SOUTHEAST OKLAHOMA INCLUDES THE MCCURTAIN, PUSHMATAHA, PITTSBURGH, BRYAN, ATOKA, LEFLORE AND LATIMER AREAS, (ODOT Division 2).

```
1=Yes
2=No
98= (DON'T KNOW)
99= (REFUSED)
```

C1c. Could your company do work or serve customers in the Oklahoma City area and other parts of Central Oklahoma (ODOT Division 3, 4 and 7)?

CENTRAL OKLAHOMA INCLUDES THE OKLAHOMA CITY, GRANT, KAY, LOGAN, LINCOLN, SEMINOLE, GARVIN GRADY, STEPEHENS JEFFERSON AND LOVE AREAS.

```
1=Yes
2=No
98= (DON'T KNOW)
99= (REFUSED)
```

C1d. Could your company do work or serve customers in the Oklahoma Panhandle?

OKLAHOMA'S PANHANDLE INCLUDES THE CIMARRON, TEXAS, BEAVER, WOODWARD, ALFALFA AND MAJOR AREAS, (ODOT Division 6).

```
1=Yes
2=No
98= (DON'T KNOW)
99= (REFUSED)
```

C1e. Could your company do work or serve customers in the Southwest Oklahoma?

SOUTHWEST OKLAHOMA INCLUDES THE TILLMAN, JACKSON, WASHITA, KIOWA, BECKHAM, DEWEY, HARMON, CUSTER, AND ROGER MILLS AREAS, (ODOT Division 5).

1=Yes

2=No

98= (DON'T KNOW)

99= (REFUSED)

D1. About what year was your firm established?

(RECORD FOUR-DIGIT YEAR, e.g., '1977')

(9998 = DON'T KNOW)

(9999 = REFUSED)

1=NUMERIC (1600-2008)

D2. In rough dollar terms, what was the largest transportation-related contract or subcontract your company was awarded in Oklahoma during the past five years?

(NOTE TO INTERVIEWER - INCLUDES CONTRACTS NOT YET COMPLETE)

(NOTE TO INTERVIEWER - READ CATEGORIES IF NECESSARY)

1=\$100,000 or less 7=More than \$10 million to \$20 million

2=More than \$100,000 to \$500,000 8=\$20 million to \$50 million

3=More than \$500,000 to \$1 million 9=Greater than \$50 million

4=More than \$1 million to \$2 million 97= (NONE)

5=More than \$2 million to \$5 million 98= (DON'T KNOW)

6=More than \$5 million to \$10 million 99= (REFUSED

D3. Was this the largest transportation contract or subcontract that your company [$bid \mid | proposed$] on or submitted quotes for in Oklahoma during the past five years?

1=Yes – SKIP TO E1

2=No

98= (DON'T KNOW) – SKIP TO E1

99= (REFUSED) – SKIP TO E1

D4. What was the largest contract or subcontract that your company [$bid \parallel proposed$] on or submitted quotes for in Oklahoma during the past five years?

(READ CATEGORIES IF NECESSARY)

1=\$100,000 or less 7=More than \$10 million to \$20 million

2=More than \$100,000 to \$500,000 8=\$20 million to \$50 million

3=More than \$500,000 to \$1 million 9=Greater than \$50 million

4=More than \$1 million to \$2 million 97= (NONE)

5=More than \$2 million to \$5 million 98= (DON'T KNOW)

6=More than \$5 million to \$10 million 99= (REFUSE)

E1. My next questions are about the ownership of the business. A business is defined as womanowned if more than half — that is, 51 percent or more — of the ownership and control is by women. By this definition, is [firm name / new firm name] a woman-owned business?

```
1=Yes
2=No
98= (DON'T KNOW)
99= (REFUSED)
```

E2. A business is defined as minority-owned if more than half — that is, 51 percent or more — of the ownership and control is African American, Asian, Hispanic, Native American or another minority group. By this definition, is [firm name || new firm name] a minority-owned business?

```
1=Yes

2=No - SKIP TO E4

3= (OTHER GROUP - SPECIFY)

98= (DON'T KNOW)

99= (REFUSED)
```

E2. OTHER GROUP - SPECIFY

1=VERBATIM

- E3. Would you say that the minority group ownership is mostly African American, Asian-Pacific American, Subcontinent Asian American, Hispanic American, or Native American?
 - 1=African-American
 - 2=Asian Pacific American (persons whose origins are from Japan, China, Taiwan, Korea, Burma (Myanmar), Vietnam, Laos, Cambodia(Kampuchea), Thailand, Malaysia, Indonesia, the Philippines, Brunei, Samoa, Guam, the U.S. Trust Territories of the Pacific Islands (Republic of Palau), the Common-wealth of the Northern Marianas Islands, Macao, Fiji, Tonga, Kirbati, Juvalu, Nauru, Federated States of Micronesia, or Hong Kong)
 - 3=Hispanic American (persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race)
 - 4=Native American (American Indians, Eskimos, Aleuts, or Native Hawaiians)
 - 5=Subcontinent Asian American (persons whose Origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal or Sri Lanka)

```
6= (OTHER - SPECIFY)
98= (DON'T KNOW)
99= (REFUSED)
```

E3. OTHER - SPECIFY

1=VERBATIM

F1. Dun & Bradstreet indicates that your company has about [number] employees working out of just your location. Is that a fairly accurate average thinking about the past 12 months?

(NOTE TO INTERVIEWER - INCLUDES EMPLOYEES WHO WORK AT THAT LOCATION AND THOSE WHO WORK FROM THAT LOCATION)

F2. About how many employees did you have working out of just your location, on average, over the course of last 12 months?

(RECORD NUMBER OF EMPLOYEES)

F3. Dun & Bradstreet lists the annual gross revenue of your company, just considering your location, to be [dollar amount]. Is that accurate for 2008?

F4. Roughly, what was the gross revenue of your company, just considering your location, in 2008? Would you say . . . (READ LIST)

1=Less than \$200,000	7=\$10 Million - \$24.9 Million
2=\$200,000 - \$499,999	8=\$25 Million - \$49.9 Million
3=\$500,000 - \$999,999	9=\$50 Million or more
4=\$1 Million - \$2.49 Million	98= (DON'T KNOW)
5=\$2.5 Million - \$4.9 Million	99= (REFUSED)
6=\$5 Million - \$9.9 Million	

F5. For 2008, about how many employees did you have, on average, for all of your locations?

1= (ENTER RESPONSE)

98= (DON'T KNOW)

99= (REFUSED)

F5. RECORD NUMBER OF EMPLOYEES

1=VERBATIM

F6. Roughly, what was the gross revenue of your company, for all of your locations in 2008? Would you say . . . (READ LIST)

1=Less than \$200,000 7=\$10 Million - \$24.9 Million

3=\$500,000 - \$999,999 9=\$50 Million or more

4=\$1 Million - \$2.49 Million 98= (DON'T KNOW)

5=\$2.5 Million - \$4.9 Million 99= (REFUSED)

6=\$5 Million - \$9.9 Million

G1. Finally, we're interested in whether your company has experienced barriers or difficulties associated with starting or expanding a business in your industry or with obtaining work. Think about your experiences within the past five years as we ask you these questions.

G1a. Has your company experienced any difficulties in obtaining lines of credit or loans?

```
1=Yes
2=No
98= (Don't know)
99= (Does not apply)
```

G1b. Has your company obtained or tried to obtain a bond for a project?

```
1=Yes
2=No [SKIP TO G1d]
98= (Don't know) [SKIP TO G1d]
99= (Does not apply) [SKIP TO G1d]
```

G1c. Has your company had any difficulties obtaining bonds needed for a project?

```
1=Yes
2=No
98= (Don't know)
99= (Does not apply)
```

G1d. Have any insurance requirements on projects presented a barrier to bidding?

```
1=Yes
2=No
98= (Don't know)
99= (Does not apply)
```

G1e. Has the size of projects presented a barrier to bidding?

```
1=Yes
2=No
98= (Don't know)
99= (Does not apply)
```

G1f. Has your company experienced any difficulties learning about bid opportunities with the Oklahoma Department of Transportation?

```
1=Yes
2=No
98= (Don't know)
99= (Does not apply)
```

G1g. Has your company experienced any difficulties learning about bid opportunities with local governments or the private sector in Oklahoma?

```
1=Yes
2=No
98= (Don't know)
99= (Does not apply)
```

G1h. Has your company experienced any difficulties learning about subcontracting opportunities in Oklahoma?

```
1=Yes
2=No
98= (Don't know)
99= (Does not apply)
```

G1i. Has your company experienced any difficulties receiving payment in a timely manner?

```
1=Yes
2=No
98= (Don't know)
99= (Does not apply)
```

G1j. Has your company looked into or applied for prequalification for Oklahoma Department of Transportation prime contracts?

```
1=Yes

2=No [SKIP TO G1m]

98= (Don't know) SKIP TO G2

99= (Does not apply) SKIP TO G2
```

G1k. Has your company experienced any difficulties with the Oklahoma Department of Transportation prequalification process?

```
1=Yes
       2=No
       98 = (Don't know)
       99= (Does not apply)
G11. What were those difficulties?
                        [OPEN-ENDED TO START, WILL CLOSE AFTER INITIAL
SURVEYS]
       98= (Don't know)
       GO TO G2
G1m. Why not?
                        OPEN-ENDED TO START, WILL CLOSE AFTER INITIAL
SURVEYS]
       98= (Don't know)
G2. Finally, we're asking for general insights on starting and expanding a business in your field
or winning work as a prime or subcontractor. Do you have any thoughts to offer on these
topics?
       1=VERBATIM (PROBE FOR COMPLETE THOUGHTS)
       97= (NOTHING/NONE/NO COMMENTS)
       98= (DON'T KNOW)
       99= (REFUSED)
G3. Would you be willing to participate in a follow-up interview about any of these issues?
       1=Yes
       2=No
       98= (DON'T KNOW)
       99= (REFUSED)
H1. Just a few last questions. What is your name and position at [firm name / new firm name]?
(RECORD FULL NAME)
       1=VERBATIM
H2. What is your position?
       1=Receptionist
```

- 2=Owner
- 3=Manager
- 4=CFO
- 5=CEO
- 6=Assistant to Owner/CEO
- 7=Sales manager
- 8=Office manager
- 9=President
- 9= (OTHER SPECIFY)
- 99= (REFUSED)

H2. OTHER - SPECIFY

1=VERBATIM

H3. For purposes of receiving information from ODOT, is your mailing address [firm address]:

1=Yes – SKIP TO H5

2=No

98= (DON'T KNOW)

99= (REFUSED)

H4. What mailing address should they use to get any materials to you?

1=VERBATIM

H5. What fax number could they use to fax any materials to you?

1=NUMERIC (1000000000-999999999)

H6. What e-mail address could they use to get any materials to you?

1=ENTER E-MAIL

97= (NO EMAIL ADDRESS)

98= (DON'T KNOW)

99= (REFUSED)

H6. (RECORD EMAIL ADDRESS) (VERIFY ADDRESS LETTER BY LETTER: EXAMPLE: 'John@CRI-RESEARCH.COM' SHOULD BE VERIFIED AS: J-O-H-N-at-C-R-I-hyphen-R-E-S-E-A-R-C-H-dot-com)

1=VERBATIM

Thank you very much for your participation. If you have any questions, please contact Susan McClune at the Oklahoma Department of Transportation. Her phone number is 405-522-1983. If you would like to contact her via email, her email address is smcclune@ODOT.ORG.

APPENDIX D. Entry and Advancement in the Construction and Engineering Industries

Appendix D reviews entry and advancement of workers in the Oklahoma construction and engineering industries. Business formation is examined in Appendix E and business success is discussed in Appendix F. BBC researches access to capital in Appendix G. Appendix H discusses data sources used in Appendices D through F. Together, these appendices present a statistical overview of marketplace conditions in the Oklahoma construction and engineering industries.

Introduction

Federal courts have found that Congress "spent decades compiling evidence of race discrimination in government highway contracting, of barriers to the formation of minority-owned construction businesses, and of barriers to entry." Congress found that discrimination had impeded the formation of qualified minority business enterprises. BBC examined whether some of the barriers to entry found on a national level also appear to occur in Oklahoma.

Representation of minorities among workers and business owners in Oklahoma. A starting point is to compare the percentage of Oklahoma businesses owned by race/ethnic minorities and women to the composition of the Oklahoma labor force. Statistics for 2008 show the following:

- African Americans comprised 8 percent of Oklahoma workers, 3 percent of business owners overall, and 3 percent of the owners of Oklahoma construction and engineering firms (see Figure D-1 on the following page);
- Hispanic Americans were 7 percent of workers, 5 percent of business owners and 8 percent of construction and engineering firm owners;
- Native Americans were 10 percent of the Oklahoma workforce, 8 percent of business owners and 12 percent of construction and engineering company owners; and
- Other minority groups (primarily Asian-Pacific Americans and Subcontinent Asian Americans) were 2 percent of the labor force and comprised 3 percent of business owners overall but 0 percent of construction and engineering business owners.

Representation of women among workers and business owners in Oklahoma. In 2008, women comprised 46 percent of the Oklahoma labor force, 30 percent of all business owners and 7 percent of people who owned construction and engineering firms. Appendices D and E further explore why representation of minorities and women in the ranks of Oklahoma construction and engineering business owners differs from the composition of the Oklahoma workforce.

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Sherbrooke Turf, Inc., 345 F.3d at 970, (citing Adarand Constructors, Inc., 228 F.3d at 1167 – 76); Western States Paving Co. v. Washington State DOT, 407 F.3d 983 (9th Cir. 2005) at 992.

Figure D-1.

Demographic distribution of workforce, business owners, and construction and engineering business owners in Oklahoma and the U.S., 2000

		•	Oklahoma						
	Workforce (a	Il industries)	Busines	s ov	vners		Busine	ss ov	wners in
		Workforce (all industries)		(all industries)			constr. & eng.		
	2000	2008	2000		2008		2000		2008
	(n=80,971)	(n=17,519)	(n=9,539)		(n=1,944)		(n=1,738)		(n=400)
Race/ethnicity									
African American	6.9 %	7.6 %	2.9 %	**	3.1 %	**	1.7 %	**	3.2 %
Hispanic American	4.5	7.1	2.1	**	4.9	**	2.5	**	8.0
Native American	9.7	9.8	8.5		8.0	**	10.9		11.7
Other minority group	1.8	2.3	1.3		2.7		0.8		0.0
Total minority	22.9 %	26.9 %	14.8 %		18.7 %		15.9 %		22.9 %
Non-Hispanic white	77.1	73.1	85.2	**	81.3	**	84.1	**	77.1
Total	100.0 %	100.0 %	100.0 %		100.0 %		100.0 %		100.0 %
Gender									
Female	45.5 %	46.0 %	31.8 %	**	30.2 %	**	8.3 %	**	7.3 %
Male	54.5	54.0	68.2	**	69.8	**	91.7	**	92.7
Total	100.0 %	100.0 %	100.0 %		100.0 %		100.0 %		100.0 %
		Uı	nited States						
	Workforce (a	II industries)	Busines				Business owners in		
			(all in	dust			constr. & eng.		
	2000	2008	2000		2008		2000		2008
	(n=6,835,013)	(n=1,523,293)	(n=676,804)		(n=157,715)		(n=119,227)		(n=29,729)
Race/ethnicity									
•						**	4.0 %	**	4.5 %
African American	10.9 %	11.8 %	4.9 %	**	5.7 %				
African American Hispanic American	10.7	14.3	7.3	**	12.0	**	7.7	**	14.6
African American Hispanic American Native American	10.7 1.1	14.3	7.3 1.0		12.0	**	7.7 1.2		1.0
African American Hispanic American Native American Other minority group	10.7 1.1 4.6	14.3 1.0 5.3	7.3 1.0 4.6		12.0 0.8 5.5	**	7.7 1.2 2.0	**	1.0 2.3
African American Hispanic American Native American	10.7 1.1	14.3	7.3 1.0		12.0	**	7.7 1.2		1.0
African American Hispanic American Native American Other minority group	10.7 1.1 4.6	14.3 1.0 5.3	7.3 1.0 4.6		12.0 0.8 5.5	**	7.7 1.2 2.0		1.0 2.3
African American Hispanic American Native American Other minority group Total minority	10.7 1.1 4.6 27.3 %	14.3 1.0 5.3 32.4 %	7.3 1.0 4.6 17.7 %	**	12.0 0.8 5.5 23.9 %	** ** **	7.7 1.2 2.0 14.9 %	**	1.0 2.3 22.4 %
African American Hispanic American Native American Other minority group Total minority Non-Hispanic white Total	10.7 1.1 4.6 27.3 %	14.3 1.0 5.3 32.4 %	7.3 1.0 4.6 17.7 % 82.3	**	12.0 0.8 5.5 23.9 %	** ** **	7.7 1.2 2.0 14.9 %	**	1.0 2.3 22.4 %
African American Hispanic American Native American Other minority group Total minority Non-Hispanic white Total	10.7 1.1 4.6 27.3 %	14.3 1.0 5.3 32.4 %	7.3 1.0 4.6 17.7 % 82.3	**	12.0 0.8 5.5 23.9 %	** ** **	7.7 1.2 2.0 14.9 %	**	1.0 2.3 22.4 %
African American Hispanic American Native American Other minority group Total minority Non-Hispanic white Total Gender	10.7 1.1 4.6 27.3 % 72.7 100.0 %	14.3 1.0 5.3 32.4 % 67.6 100.0 %	7.3 1.0 4.6 17.7 % 82.3 100.0 %	**	12.0 0.8 5.5 23.9 % 76.1 100.0 %	** ** ** **	7.7 1.2 2.0 14.9 % 85.1 100.0 %	**	1.0 2.3 22.4 % 77.6 100.0 %

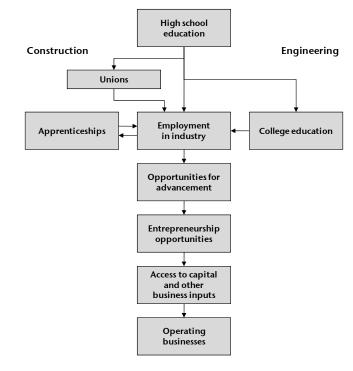
Note: ** Denotes that the difference in proportions between all workers and business owners (or business owners in the construction and engineering industries) for the given race/ethnicity/gender group and Census/ACS year is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 2000 U.S. Census 5% and 2008 American Community Survey 1% Public Use Micro-sample data. The raw data extracts were obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

One potential source of barriers is the process of entry and advancement in the construction and engineering industries. Business owners are often individuals who came from the ranks of people working in that industry. This Appendix uses 1980 and 2000 Census data and 2008 American Community Survey (ACS) data to analyze education, employment and workplace advancement — all factors that may ultimately influence business formation. Where possible, BBC used these data to separately examine any barriers to entry for construction and engineering, as entrance requirements and opportunities for advancement differ for these two industries. Figure D-2 outlines the different paths to business formation for these industries.

Figure D-2. Model for studying entry into the industry

Source: BBC Research & Consulting.



Construction Industry

BBC first examined how education, training, employment and advancement may influence business ownership outcomes for different race/ethnicity and gender groups in the construction industry in Oklahoma and the nation.

Education. Formal education beyond high school is not a prerequisite for most construction industry jobs. For this reason, the construction industry often attracts individuals who do not have a high level of educational attainment.

Many construction industry employees in Oklahoma have, at most, a high school education. Based on the 2000 Census of Population, 41 percent of workers in construction were high school graduates with no post-secondary education, and 25 percent had not finished high school. According to 2008 ACS data, 38 percent of Oklahoma construction workers were just high school graduates and 24 percent had no high school diploma. Among people working in construction in Oklahoma, 6 percent in 2000 and 8 percent in 2008 had at least a four-year college degree.

In the Oklahoma labor force, Native Americans and Hispanic Americans represent a relatively large pool of workers with no post-secondary education. In 2000, 66 percent of Hispanic Americans and 49 percent of Native American workers age 25 and older had no formal education beyond high

school, compared to 41 percent of non-Hispanic whites and 43 percent of African Americans. Although the percentage of workers with no college education declined for some race/ethnicity groups between 2000 and 2008, percentages for Native Americans and Hispanic Americans were still substantially higher than those for non-Hispanic whites in 2008.

Based on minimal requirements for formal education for entry-level jobs and the limited education beyond high school for many Native Americans and Hispanic Americans in Oklahoma, one would expect relatively high representation of these minority groups in the Oklahoma construction industry.

Training in the construction industry is largely on-the-job or through trade schools and apprenticeship programs. Entry-level jobs for workers out of high school are often as laborers, helpers or apprentices. Higher-skilled positions in the construction industry may require additional training through a technical or trade school, or through an apprenticeship or other employer-provided training program. Apprenticeship programs can be developed by employers, trade associations, trade unions and other groups. Workers can enter apprenticeship programs from high school or a trade school. Apprenticeships have traditionally been three- to five-year programs that combine on-the-job training with classroom instruction. Opportunities for these programs across race/ethnicity are discussed later in this appendix.

Among workers 25 and older in Oklahoma, 36 percent of Asian-Pacific Americans and 55 percent of Subcontinent Asian Americans had at least a four-year college degree in 2000, a higher rate than non-Hispanic whites. Given the relatively high educational levels of Asian-Pacific Americans and Subcontinent Asian Americans in Oklahoma, representation of these groups in construction might be low relative to other groups.

In Oklahoma, women workers age 25 and older were more likely than men to have education beyond high school. Based on 2000 data, 59 percent of female workers age 25 and older had at least some college education, compared to 56 percent of males in Oklahoma. This gap widened in 2008.

Employment. With educational opportunities and attainment for minorities and women as context, the study team examined employment in Oklahoma's construction industry.

Of the people working in construction in Oklahoma in 2008:

- 15 percent were Hispanic Americans (compared with 7% in the Oklahoma workforce);
- 10 percent were Native Americans (compared with 10% of the workforce);
- Roughly 4 percent were African Americans (compared with 8% of the workforce); and
- Less than 1 percent were from other minority groups (mostly Asian-Pacific Americans and Subcontinent Asian Americans, and substantially less than found in the workforce).

² Bureau of Labor Statistics, U.S. Department of Labor. 2006-07. "Construction." Career Guide to Industries. http://www.bls.gov/oco/cg/cgs003.htm (accessed February 15, 2007).

In Oklahoma, Hispanic Americans made up a greater share of workers in construction than in the labor force as a whole, representing 15 percent of construction workers but only 7 percent of all workers in 2008. In contrast, African Americans working in Oklahoma were less likely to work in construction than other industries.

- African Americans in Oklahoma were one-half as likely to work in construction as the average worker in 2008. Because average educational attainment of African Americans is consistent with requirements for construction jobs, other factors may be behind the relatively low number of African American workers in this industry. A number of studies throughout the United States have argued that race discrimination by construction unions has held down employment of African Americans in construction trades.³ (The potential for unions to present a barrier to construction jobs is discussed beginning on page 7 of this Appendix.)
- Representation of other minority groups in construction was also lower than in the whole labor force. Asian-Pacific Americans made up less than 1 percent of the construction workforce but 2 percent of all workers in Oklahoma in 2008. There were no observations corresponding to Subcontinent Asian American construction workers in Oklahoma in either the 2000 or 2008 data. ⁴ The fact that Asian-Pacific Americans and Subcontinent Asian Americans are more likely to go to college than other groups may partly explain this difference.

There are also large differences between the percentage of construction workers who are women and the percentage of women in the labor force. Although the Oklahoma workforce was almost divided equally between male and female workers in 2008, fewer than one in ten construction workers were women. Representation of women in the construction workforce declined between 2000 and 2008.

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³ See, for example, Waldinger, Roger and Thomas Bailey. 1991. "The Continuing Significance of Race: Racial Conflict and Racial Discrimination in Construction." *Politics & Society*, 19(3).

⁴ Note that Census definitions of race and ethnicity have changed over time, which affects comparability of statistics from one census year to the next. Appendix H discusses how BBC coded data concerning race and ethnicity for each Census and for the 2008 ACS.

Overall, these differences in Oklahoma employment patterns are similar to those seen in the construction industry for the nation. Figure D-3 uses data from 1980, 2000 and 2008 to compare the demographic composition of workers in the construction industry with the whole labor force in Oklahoma and the United States.

Figure D-3.

Demographic distribution of workers in construction and all industries in Oklahoma and the U.S., 1980, 2000 and 2008

	Oklahoma					
	Construction All industries					
	1980 (n=5,079)	2000 (n=6,077)	2008 (n=1,287)	1980 (n=68,627)	2000 (n=80,971)	2008 (n=17,519)
Race/ethnicity						
African American	3.8 % **	3.4 % **	3.5 % **	6.1 %	6.9 %	7.6 %
Hispanic American	1.6	8.5 **	15.0 **	1.7	4.5	7.1
Native American	6.4 **	12.7 **	10.3 **	4.5	9.7	9.9
Other minority group	0.2 **	0.6 **	0.4 **	0.7	1.8	2.3
Total minority	11.9 %	25.2 %	29.2 %	12.9 %	22.9 %	26.9 %
Non-Hispanic white	88.1 **	74.8 **	70.8	87.1	<u>77.1</u>	73.1
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
Gender						
Female	7.7 % **	9.3 % **	7.9 % **	40.9 %	45.5 %	46.0 %
Male	92.3 **	90.7 **	92.1 **	<u>59.1</u>	54.5	54.0
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
			United	States		
		Construction			All industries	
	1980 (n=330,464)	2000 (n=480,280)	2008 (n=107,037)	1980 (n=5,287,471)	2000 (n=6,832,970)	2008 (n=1,523,293)
Race/ethnicity						
African American	7.4 % **	6.2 % **	6.0 % **	10.1 %	10.9 %	11.8 %
Hispanic American	5.9 **	15.0 **	23.6 **	5.7	10.7	14.3
Native American	0.8 **	1.5 **	1.2 **	0.5	1.1	1.0
Other minority group	0.9 **	1.9 **	2.1 **	1.7	4.6	5.3
Total minority	14.9 %	24.5 %	32.8 %	18.1 %	27.3 %	32.4 %
Non-Hispanic white	85.1 **	75.5 **	67.2 **	81.9	72.7	67.6
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
Gender						
Female	7.9 % **	9.9 % **	9.1 % **	42.2 %	46.5 %	46.7 %
Male	92.1 **	90.1 **	90.9 **	57.8	53.5	53.3
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %

Note: ** Denotes that the difference in proportions between the construction and all industry groups for the given Census/ACS year is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 1980 and 2000 U.S. Census 5% sample and 2008 ACS Public Use Micro-sample data. The raw data extracts were obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

Importance of unions in entering the construction industry. Labor scholars characterize construction as a historically volatile industry sensitive to business cycles, making the presence of labor unions important for stability and job security within the industry. The temporary nature of construction work results in uncertain job prospects, and the high turnover of laborers present a disincentive for construction firms to invest in training. Some scholars have claimed that constant turnover has lent itself to informal recruitment practices and nepotism, compelling laborers to tap social networks for training and work. They credit the importance of social networks with the high degree of ethnic segmentation in the construction industry. Unable to integrate themselves into traditionally white social networks, African Americans faced long-standing historical barriers to entering the industry.

Construction unions aim to provide a reliable source of labor for employers and preserve job opportunities for workers by formalizing the recruitment process, coordinating training and apprenticeships, enforcing standards of work, and mitigating wage competition. The unionized sector of construction would seemingly be the best road for African American and other under-represented groups into the industry. However, researchers have identified that discrimination by trade unions has historically prevented minorities from obtaining employment in skilled trades. Past papers claim union discrimination took place in a variety of forms. For example:

- Unions have used admissions criteria that adversely affect minorities. Federal courts ruled in the 1970s that standardized testing requirements unfairly disadvantaged minority applicants who had less exposure to testing, and that requirements that new union members have relatives in the union perpetuated the effects of past discrimination.⁹
- Of those minority individuals who are admitted to unions, a disproportionately low number are admitted into apprenticeship programs coordinated by unions. Apprenticeship programs are important means of producing skilled construction laborers, and the reported exclusion of African Americans from these programs has severely limited their access to skilled occupations in the construction industry.¹⁰
- Although formal training and apprenticeship programs exist within unions, most training of union members takes place informally through social networking. Nepotism characterizes the unionized sector of construction as it does the non-unionized sector, and this favors a white-dominated status quo.

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⁵ Applebaum, Herbert. 1999. Construction Workers, U.S.A. Westport: Greenwood Press.

⁶ Waldinger, Roger and Thomas Bailey. 1991. "The Continuing Significance of Race: Racial Conflict and Racial Discrimination in Construction." *Politics & Society*, 19(3).

Feagin, Joe R. and Nikitah Imani. 1994. "Racial Barriers to African American Entrepreneurship: An Exploratory Study." *Social Problems*. 41(4): 562-584.

⁸ U.S. Department of Justice. 1996. Proposed Reforms to Affirmative Action in Federal Procurement. 61 FR 26042.

⁹ Ibid. See United States v. Iron Workers Local 86 (1971), Sims v. Sheet Metal Workers International Association (1973), and United States v. International Association of Bridge, Structural and Ornamental Iron Workers (1971).

¹⁰ Applebaum, Herbert. 1999. Construction Workers, U.S.A. Westport: Greenwood Press.

¹¹ Ibid. 299. A high percentage of skilled workers reported having a father or relative in the same trade. However, the author suggests this may not be indicative of current trends.

- Traditionally white unions have been successful in resisting policies designed to increase African American participation in training programs. The political strength of unions in resisting affirmative action in construction has hindered the advancement of African Americans in the industry.¹²
- Discriminatory practices in employee referral procedures, including apportioning work based on seniority, have precluded minority union members from having the same access to construction work as their white counterparts.
- According to testimony from African American union members, even when unions implement meritocratic mechanisms of apportioning employment to laborers, white workers are often allowed to circumvent procedures and receive preference for construction jobs.¹⁴

However, these historical observations may not be indicative of current dynamics in construction unions. For example, the 2007 Current Population Survey (CPS) provides data indicating union membership for African Americans and non-Hispanic whites to be similar. The CPS asked participants "Are you a member of a labor union or of an employee association similar to a union?" CPS data show union membership for African Americans in construction to be 11 percent and non-Hispanic whites to be 12 percent (not a statistically significant difference). On the other hand, based on these national data, only 7 percent of Hispanic Americans are union members.

A recent study on the presence of African Americans and Hispanic Americans in apprenticeship programs may help explain the high rates of Hispanics in the construction industry despite low union memberships. Two types of apprenticeship programs are available, joint programs (run by a combination of a union and one or more employers) and non-joint programs (run solely by one or more employers). Using 1989-1995 data from the U.S. Department of Labor, the study found that the probability of an African American being an apprentice in a joint program was 8 percent higher than in a non-joint program.

On the other hand, Hispanic Americans' odds of being in a non-joint program were 7 percent higher than in a joint program. ¹⁶ These data suggest that Hispanic Americans may be more likely than African Americans to enter the construction industry without the support of a union. Thus, one reason that Hispanic Americans represent a large portion of the construction workers may be that their participation is less hindered by possible union discrimination.

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¹² Waldinger and Bailey. 1991. "The Continuing Significance of Race: Racial Conflict and Racial Discrimination in Construction."

¹³ U.S. Department of Justice. 1996. Proposed Reforms to Affirmative Action in Federal Procurement. 61 FR 26042. See *United Steelworkers of America v. Weber* (1979) and *Taylor v. United States Department of Labor* (1982).

¹⁴ Feagin and Imani. 1994. "Racial Barriers to African American Entrepreneurship: An Exploratory Study." *Social Problems*. 41(4): 562-584.

¹⁵ 2006 Current Population Survey (CPS), U.S. Census Bureau and Bureau of Labor Statistics.

¹⁶ Bilginsoy, Cihan. 2005. "How Unions Affect Minority Representation in Building Trades Apprenticeship Programs." *Journal of Labor Research*, 57(1).

Further, union membership in Oklahoma is much lower than the rest of the country. Across all Oklahoma industries, 5.7 percent of employed people in 2009 were union members, less than one-half of the rate for the country as a whole.¹⁷

Advancement in construction. To research opportunities for advancement in the Oklahoma construction industry, the study team examined representation of minorities and women in different construction occupations, as defined by the U.S. Bureau of Labor Statistics.¹⁸

Racial and ethnic composition of construction laborers and first-line supervisors. Figure D-4 compares the race/ethnicity of all construction workers with that of construction laborers and first-line supervisors in 2000 and 2008.

Figure D-4.

Demographic distribution of workers in selected construction occupations in Oklahoma, 2000 and 2008

		2000			2008	
	All construction (n=6,077)	Construction laborers (n=686)	First-line supervisors (n=497)	All construction (n=1,287)	Construction laborers (n=148)	First-line supervisors (n=127)
Race/ethnicity						
African American	3.4 %	6.1 %	1.4 %	3.5 %	4.5 %	3.7 %
Hispanic American	8.5	19.3	6.9	15.0	34.8	8.5 **
Native American	12.7	15.5	12.8	10.3	13.7	15.4
Other minority group	0.6	1.0	0.3	0.4	0.9	0.7
Total minority	25.2 %	41.9 %	21.4 %	29.2 %	53.9 %	28.3 %
Non-Hispanic white	74.8	58.1	78.6	70.8	46.1	<u>71.7</u> **
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
Gender						
Female	9.3 %	3.8	2.1 %	7.9 %	1.4 %	3.9 %
Male	90.7	96.2	97.9	92.1	98.6	<u>96.1</u>
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %

Note: ** Denotes that the difference in proportions between construction laborers and first-line supervisors for the given Census/ACS year is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 2000 Census and 2008 American Community Survey data. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

Based on 2000 Census and 2008 ACS data, differences exist in the representation of minorities and women within different construction occupations. Overall, 42 percent of construction laborers were minorities in 2000, while minorities represented only 21 percent of first-line supervisors and 25 percent of all construction workers. ACS data show that minorities also represented a larger share of construction laborers compared with first-line supervisors and the whole construction labor force in 2008.

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¹⁷ Bureau of Labor Statistics, U.S. Department of Labor. 2010. "Union Members 2009." http://www.bls.gov/news.release/pdf/union2.pdf (accessed April 1, 2010).

¹⁸ Bureau of Labor Statistics, U.S. Department of Labor. 2001. "Standard Occupational Classification Major Groups." http://www.bls.gov/soc/soc_majo.htm (accessed February 15, 2007).

Hispanic Americans and Native Americans were the largest minority groups in the industry and in the two occupations examined:

- In 2008, Hispanic Americans were 35 percent of construction laborers but only about 9 percent of first-line supervisors (a statistically significant difference).
- Native Americans comprised 14 percent of construction laborers in 2008, similar to their representation among all construction workers (also true for 2000).
- African Americans represented the third-largest minority group among the two occupations examined. In 2000, African Americans represented 6 percent of construction laborers and about 1 percent of first-line supervisors. In 2008, this gap was smaller, with African Americans representing 5 percent of construction laborers and nearly 4 percent of first-line supervisors.

Women in construction trades. Figure D-4 also compares the representation of women in the construction labor force with their representation among construction laborers and first-line supervisors. Overall, less than 10 percent of workers in the Oklahoma construction industry were women in 2000 and 2008. Representation of women in the Oklahoma construction workforce declined from 2000 to 2008.

Representation of women among construction laborers and first-line supervisors was lower than in the construction labor force as a whole. In 2000, women comprised 9 percent of all construction workers but only 4 percent of construction laborers and 2 percent of first-line supervisors.

Relative share of minorities and women in construction who are managers. Figure D-4 shows the representation of minorities and women among first-line supervisor positions in the Oklahoma construction industry. The study team also reviewed employment of minorities and women as managers, a higher position than first-line supervisor.

Construction managers, on average, have somewhat more education than first-line supervisors. In Oklahoma in 2000, 15 percent of construction managers had at least a bachelor's degree, compared with 6 percent of first-line supervisors. Figure D-5 shows the proportion of workers in the construction industry who reported a "manager" occupation by race/ethnicity and gender groups in 1980, 2000 and 2008.

In 2000, roughly 6 percent of non-Hispanic whites working in the Oklahoma construction industry were managers. The percentage of construction workers who were managers for other race/ethnic groups was lower:

- Roughly 3 percent of Hispanic Americans were managers (a statistically significant difference).
- About 4 percent of African Americans and Native Americans in the construction industry labor force were managers.
- Representation of other minority groups among construction managers in Oklahoma in 2000 was very low.

In 2008, the percentage of Hispanic Americans and Native Americans who were construction managers remained below that of non-Hispanic whites in Oklahoma.

- Less than 1 percent of Hispanic American construction workers were managers in 2008, compared to 10 percent of non-Hispanic whites (a statistically significant difference).
- Roughly 2 percent of Native American construction workers were managers the difference with the rate for non-Hispanic whites was statistically significant.

Based on 2008 data, there was little difference between the percentage of African Americans and non-Hispanic whites working in the Oklahoma construction industry who were managers.

Female construction workers were also less likely to be managers than male construction workers in 2000 and 2008. In 2008, about 4 percent of women in the Oklahoma construction industry were managers compared to 8 percent of men.

Figure D-5.
Percentage of construction
workers who work as a manager,
Oklahoma and the U.S., 1980,
2000 and 2008

Note:

** Denotes that the difference in proportions between the minority and non-Hispanic white groups (or female and male gender groups) for the given Census/ACS year is statistically significant at the 95% confidence level.

Source

BBC Research & Consulting from 1980 and 2000 U.S. Census 5% sample and 2008 ACS Public Use Microsample data. The raw data extracts were obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

Oklahoma	1980 (n=5,079)	2000 (n=6,077)	2008 (n=1,287)
Race/ethnicity			
African American	2.6 %	4.1 %	11.6 %
Hispanic American	0.0	2.5 **	0.6 **
Native American	2.1 **	3.5	2.2 **
Other minority group	0.0	0.0	0.0
Non-Hispanic white	4.4	6.3	9.9
Gender			
Female	4.4 %	3.4 %	4.3 %
Male	4.1	5.8	8.0
All individuals	4.1 %	5.5 %	7.7 %
United States	1980	2000	2008
United States		2000 (n=480,280)	
United States Race/ethnicity			
2.002.00			
Race/ethnicity	(n=330,464)	(n=480,280)	(n=107,037)
Race/ethnicity African American	(n=330,464) 1.5 % **	(n=480,280) 3.1 % **	(n=107,037) 4.1 % **
Race/ethnicity African American Hispanic American	(n=330,464) 1.5 % ** 2.0 **	(n=480,280) 3.1 % ** 2.5 **	(n=107,037) 4.1 % ** 3.1 **
Race/ethnicity African American Hispanic American Native American	(n=330,464) 1.5 % ** 2.0 ** 2.6 **	3.1 % ** 2.5 ** 4.6 **	(n=107,037) 4.1 % ** 3.1 ** 6.3 **
Race/ethnicity African American Hispanic American Native American Other minority group	(n=330,464) 1.5 % ** 2.0 ** 2.6 ** 4.2 **	3.1 % ** 2.5 ** 4.6 ** 7.6	(n=107,037) 4.1 % ** 3.1 ** 6.3 ** 9.3
Race/ethnicity African American Hispanic American Native American Other minority group Non-Hispanic white	(n=330,464) 1.5 % ** 2.0 ** 2.6 ** 4.2 **	3.1 % ** 2.5 ** 4.6 ** 7.6	(n=107,037) 4.1 % ** 3.1 ** 6.3 ** 9.3
Race/ethnicity African American Hispanic American Native American Other minority group Non-Hispanic white Gender	1.5 % ** 2.0 ** 2.6 ** 4.2 ** 4.9	3.1 % ** 2.5 ** 4.6 ** 7.6 7.5	(n=107,037) 4.1 % ** 3.1 ** 6.3 ** 9.3 9.4

Engineering Industry

BBC next examined how education, training and employment may influence business ownership outcomes for different race/ethnicity and gender groups in the engineering industry in Oklahoma and the nation.

Education. Education is an important factor for entry into the engineering workforce. A four-year college degree in engineering is an important qualification in that industry. Barriers to such education may affect employment and ultimately advancement and business ownership. Greater barriers for minorities and women could, in part, explain relative differences in business ownership by race/ethnicity and gender. ¹⁹

Based on Census data for 2000, 51 percent of individuals working in the engineering industry in Oklahoma had at least a four-year college degree. When examining people who reported working as civil or environmental engineers, the percentage is even greater — 81 percent had at least a four-year college degree.

The level of education necessary to become an engineer appears to be a barrier for African Americans, Hispanic Americans and Native Americans. Among those in the labor force age 25 and older, the percentage of African Americans, Hispanic Americans and Native Americans with a bachelors degree or higher was substantially lower than that of non-Hispanic whites in both 2000 and 2008. Figure D-6 presents the percentage of workers 25 and older who had at least a four-year degree for the whole labor force in Oklahoma and the United States in 2000 and 2008.

In Oklahoma, most race/ethnicity groups showed an increase from 2000 to 2008 in the proportion of workers with degrees. However, the percentage of Hispanic American workers with at least a four-year degree declined slightly during this time. In 2008, Hispanic American, Native American and African American workers continued to have lower percentages of four-year college graduates than non-Hispanic whites. In contrast, a greater proportion of Asian-Pacific American and Subcontinent Asian American workers were college graduates than non-Hispanic white workers.

Between 2000 and 2008, the percentage of female workers with four-year college degrees surpassed that of males in Oklahoma and the United States.

¹⁹ Feagin, Joe R. and Nikitah Imani. 1994. "Racial Barriers to African American Entrepreneurship: An Exploratory Study." *Social Problems*. 42 (4): 562-584.

Figure D-6.

Percentage of labor force 25 and older with at least a four-year degree in Oklahoma and the United States, 2000 and 2008

Oklahoma	2000	2008	United States	2000	2008
Race/ethnicity			Race/ethnicity		
African American	18.5 % **	22.2 % **	African American	19.1 % **	22.2 % **
Asian-Pacific American	36.0 **	40.2 **	Asian-Pacific American	45.0 **	48.7 **
Subcontinent Asian American	55.0 **	74.1 **	Subcontinent Asian American	68.4 **	73.3 **
Hispanic American	11.4 **	11.1 **	Hispanic American	13.4 **	14.9 **
Native American	17.1 **	21.8 **	Native American	17.1 **	20.1 **
Other minority group	32.5	17.6	Other minority group	30.0 **	34.5
Non-Hispanic white	26.8	29.0	Non-Hispanic white	32.5	35.8
Gender			Gender		
Female	24.6 %	28.3 % **	Female	29.3 % **	33.0 % **
Male	25.3	25.8	Male	30.2	31.5
All individuals	25.0	27.0	All individuals	29.8	32.2

Note: ** Denotes that the difference in proportions between the minority and non-Hispanic white groups (or female and male gender groups) for the given Census/ACS year is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 2000 U.S. Census 5% sample and 2008 ACS Public Use Micro-sample data. The raw data extracts were obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

Additional indices of high school educational attainment. Because college admission is an important step in entering the engineering industry, the study team examined additional information on the educational achievement of minority high school students in Oklahoma. Universities generally evaluate prospective students based on a number of factors, including high school achievement and standardized test scores. One such test, the American College Testing assessment (ACT), measures educational attainment in four subject areas: English, Mathematics, Reading, and Science Reasoning. The same organization that administers the ACT also measures "college readiness" among students who take the test for college admissions by using a benchmark score — the minimum score needed in each subject area to indicate a 50 percent chance of obtaining a "B" or higher or a 75 percent chance of obtaining a "C" or higher in a corresponding college-level course. Each year, ACT publishes its findings in an Oklahoma-specific report, which shows the percent of students from each race/ethnic group meeting the college readiness benchmark score.

Using these benchmark scores, BBC created an attainment index for minority students by measuring their scores against those of non-Hispanic white students. For example, about 6 percent of African American students in Oklahoma met the ACT benchmark score for Science Reasoning, compared to about 27 percent of non-Hispanic white students. BBC created an "index" for African American college readiness by dividing 6 percent by 27 percent, and then multiplying by 100, yielding an index value of 22. Hispanic American students in Oklahoma had a college readiness index of 44 when measured against non-Hispanic white students in this subject area.

As shown in Figure D-7, high school achievement indices range from 15 to 52 for African American students in Oklahoma. For Hispanic American and Native American students, high school achievement indices range from 40 to 64 and 55 to 79, respectively. Figure D-7 also shows ACT composite scores, which are calculated from raw scores received on the test, to make scores comparable across years. Using the same indexing method, it also presents average freshman graduation rates (for high school) and high school dropout rates for different racial and ethnic groups.

Figure D-7.
Indices of high school achievement for African Americans, Asian Americans,
Hispanic Americans and non-Hispanic whites in Oklahoma, 2005-2006 (white=100)

Oklahoma	African American	Asian American	Hispanic American	Native American	Non-Hispanic white
ACT college readiness benchmark index for:					
English	52	95	64	79	100
Math	28	144	56	61	100
Reading	43	96	61	77	100
Science Reasoning	22	115	44	59	100
All four	15	125	40	55	100
ACT composite score	80	103	86	92	100
Average freshman graduation rate	88	127	93	99	100
High school dropout rate	152	58	200	123	100

Note: Data for college readiness are from the graduating class of 2006, and data for graduation rates and dropout rates are from 2005-2006. The Average Freshman graduation rate (AFGR) is an estimate of the percentage of the entering high school freshman class graduating in four years. For a more detailed explanation, visit the United States Department of Education website.

Source: BBC Research & Consulting from ACT. ACT High School Profile Report. Oklahoma, 2006 & U.S. Department of Education, Common Core of Data. Public School Graduates and Dropouts from the Common Core of Data; School Year 2005-2006.

Notable indices for African Americans included:

- Meeting the ACT college readiness benchmark score for Math at 28 percent of the rate for non-Hispanic white students in Oklahoma;
- Meeting the ACT college readiness benchmark score for all four subject areas at 15 percent of the rate for non-Hispanic white students in Oklahoma.
- Having a high school dropout rate that is 152 percent of that for non-Hispanic white students in Oklahoma.

African American students in Oklahoma generally performed better on humanities-oriented subject areas of the ACT. In terms of the college readiness benchmark score, the smallest disparity between African Americans and non-Hispanic whites was in English.

There were also disparities in college readiness and high school achievement for Hispanic American and Native American students in Oklahoma when measured against non-Hispanic white students. In the 2005-2006 school year, Hispanic Americans had a high school dropout rate higher than that of African Americans and double that of non-Hispanic whites.

Asian American students, on the other hand, had higher rates of college readiness in Math and Science Reasoning, higher graduation rates and lower high school dropout rates, compared to non-Hispanic whites. Asian American college readiness rates for English and Reading were slightly lower than those for non-Hispanic whites.

Disparities in educational attainment through high school are important for explaining the relatively low number of African Americans, Hispanic Americans, and Native Americans who have college degrees in Oklahoma. National studies consider the extent to which disparities in the quality of education causes these disparities in educational outcomes for minority high school students, but these studies are not reviewed here.

Additional factors affecting college engineering programs in Oklahoma. Historically, college engineering programs in the United States were slow to open doors to minorities such as African Americans. A study by the National Action Council for Minorities in Engineering (NACME) argues that while opportunities have improved slightly for these students, lack of adequate high school preparation has limited the ability of certain minority groups to enter engineering programs in representative numbers. Only about 4 percent of under-represented minorities graduate high school with the knowledge and skills necessary to enter university engineering programs. This is consistent with the low rates of college readiness in Math and Science Reasoning for African Americans, Hispanic Americans and Native Americans in Oklahoma shown in Figure D-7.

Although some studies explain the relative lack of minority students in college engineering programs as a problem of input — that is, African Americans, Hispanic Americans, and Native Americans do not acquire necessary knowledge and skills during the educational stages leading up to college — other studies suggest that a lack of diversity in university engineering faculties constrains minority enrollment in these programs. Engineering programs without minority faculty members struggle to enroll and maintain a diverse student body due to a lack of mentors and role models for minority students. These students may also perceive the lack of diversity as a reflection on the engineering industry as a whole. A 2007 study reported that engineering departments at top research universities have relatively fewer minority faculty members compared to other academic departments. Data from the University of Oklahoma (OU) and Oklahoma State University (OSU) show the following with respect to engineering departments:

- From 2005 to 2008, minorities represented an average of about 13 percent of the engineering department faculty at Oklahoma State University; African Americans and Hispanic Americans combined to represent less than 1 percent of engineering faculty.
- For the same years, the engineering department at the University of Oklahoma consisted of about 27 percent minority faculty members, but there were no African Americans or Native Americans on the faculty.

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²⁰ Unknown Author. 2003. "Blacks Strive to Build a Bridgehead in Academic Engineering." *The Journal of Blacks in Higher Education*. 41 (Autumn): 98-108, 98.

²¹ Frehill, Lisa M. "Confronting the New American Dilemma." National Action Council for Minorities in Engineering. 2008.

Nelson, Donna J. "A National Analysis of Minorities in Science and Engineering Faculties at Research Universities." Chem..ou.edu/~djn/diversity/Faculty_Tables_FY07/FinalReport07.html (accessed December 22, 2009).

- Both schools' engineering departments had a larger proportion of Asian American faculty members compared to other minority groups.
- Lack of minority representation in engineering faculty does not appear to affect minority enrollment in undergraduate engineering programs compared to other programs at Oklahoma universities, but it may have an impact on retention and graduation rates among such students. Some studies suggest that while their enrollment has increased in university engineering departments, minorities continue to earn degrees at a rate lower than that of non-Hispanic white students.

To better understand the broader patterns of enrollment by race and ethnicity, the study team examined engineering and total undergraduate minority enrollment at OU and OSU. Figure D-8 shows the average annual enrollment of engineering students and all undergraduate students between 2001 and 2008, by race/ethnicity.

Overall, representation of minorities among all engineering undergraduates at OU was similar to or greater than their representation in all programs during this period. The OSU engineering department had a somewhat smaller representation of African American and Native American students compared to the overall undergraduate population.

However, female representation among all engineering students at both OU and OSU was far lower than their representation for all undergraduate programs, as shown below.

Figure D-8.

Average annual enrollment of undergraduates at OU and OSU by race and ethnicity, 2001-2008

	University of Oklahoma		Oklahoma Sta	ate University
	Engineering	All colleges	Engineering	All colleges
Race/ethnicity				
African American	7.0 %	5.8 %	3.1 %	4.1 %
Asian American	9.3	5.3	3.1	1.8
Hispanic American	5.6	3.9	2.4	2.3
Native American	6.9	7.4	7.4	8.9
Total minority	28.9 %	22.5 %	16.0 %	17.2 %
Non-Hispanic white	71.1	77.5	84.0	82.9
Total	100.0 %	100.0 %	100.0 %	100.0 %
Gender				
Female	19.2 %	51.1 %	16.8 %	48.2 %
Male	<u>80.8</u>	<u>48.9</u>	<u>83.2</u>	<u>51.8</u>
Total	100.0 %	100.0 %	100.0 %	100.0 %

Note: Enrollment totals are for U.S. residents. International and non-resident students are not included.

Source: BBC Research & Consulting from Oklahoma State University college ledgers and the University of Oklahoma Factbooks, 2001-2008.

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²³ Murphy, Shehab. 2007. "Academic Struggles and Strategies: How Minorities Persist." Research Institute for STEM Education. (1).

Employment. With educational opportunities and attainment for minorities and women as context, the study team examined the race/ethnicity and gender composition of the engineering industry in Oklahoma and the U.S. in 1980 and 2000.

Figure D-9 compares the demographics of civil engineers to those of workers age 25 and older with a college degree for Oklahoma and the U.S. in 1980 and 2000. In Oklahoma:

- In 2000, there were relatively fewer African Americans and Hispanic Americans among civil engineers than among all college-educated workers age 25 or older. However, these differences were not statistically significant (possibly due to small sample sizes).
- Women were relatively under-represented among civil engineers in both 1980 and 2000. In 2000, women were 16 percent of civil engineers and 45 percent of workers age 25 and older with a college degree (a statistically significant difference). Although the relative number of female civil engineers increased between 1980 and 2000, representation of women among civil engineers was still substantially below their representation in the college-educated workforce.

Some of the employment patterns for civil engineers in Oklahoma are consistent with those seen for the nation between 1980 and 2000. However, small sample sizes for civil engineers in both 1980 and 2000 mean that caution should be used in examining these figures for Oklahoma.

There were insufficient observations corresponding to engineers in Oklahoma in the 2008 ACS for these data to be included in this analysis.

Figure D-9.

Demographic distribution of civil engineers and workers age 25 and older with a college degree in all industries in Oklahoma and the U.S., 1980 and 2000

	Oklahoma					
	Civil eng		Workers 25+	with a degree		
	1980	2000	1980	2000		
	(n=100)	(n=80)	(n=10,391)	(n=14,919)		
Race/ethnicity						
African American	1.0 %	3.0 %	3.8 %	4.8 %		
Hispanic American	2.0	0.2	0.9	1.7		
Native American	1.0	9.7	2.7	6.4		
Other minority group	5.0	<u>3.2</u>	1.3	2.6		
Total minority	9.0 %	16.1 %	8.6 %	15.6 %		
Non-Hispanic white	91.0	83.9	91.4	84.4		
Total	100.0 %	100.0 %	100.0 %	100.0 %		
Gender						
Female	1.0 %	15.7 % **	31.9 %	44.7		
Male	99.0	84.3 **	68.1	<u>55.3</u> %		
Total	100.0 %	100.0 %	100.0 %	100.0 %		
		United				
	Civil eng			with a degree		
	1980 (n=10,087)	2000 (n=12,192)	1980 (n=858,464)	2000 (n=1,631,919)		
	(n=10,087)	(n=12,192)	(n=636,464)	(n=1,631,919)		
Race/ethnicity						
African American	2.5 % **	3.7 % **	5.3 %	6.8 %		
Hispanic American	2.9 **	4.4	2.5	4.4		
Native American	0.2	0.8 **	0.2	0.6		
Other minority group	6.3 **	<u>9.3</u> **	3.4	<u>7.3</u>		
Total minority	11.8 %	18.2 %	11.4 %	19.1 %		
Non-Hispanic white	88.2	<u>81.8</u> **	88.6	80.9		
Total	100.0 %	100.0 %	100.0 %	100.0 %		
Gender						
Female	3.0 % **	10.3 % **	34.7 %	45.6 %		
Male	97.0 **	89.7 **	65.3	54.4		

Note: ** Denotes that the difference in proportions between civil engineers and workers age 25 or older with a four-year degree in all industry groups for the given Census/ACS year is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 1980 and 2000 U.S. Census 5% sample. The raw data extracts were obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

Summary of Entry and Advancement in the Construction and Engineering Industries

BBC's analysis suggests that barriers to entry into the construction and engineering industries in Oklahoma may help to explain relatively low numbers of businesses owned by certain minority groups and women.

- College education appears to be a barrier for entry of African Americans, Hispanic Americans and Native Americans into the engineering industry in Oklahoma.
 Disparities in educational attainment for each of these groups appear at the high school level, which may affect college opportunities.
- There is low representation of women among civil engineers, especially in light of the fact that more female than male workers in Oklahoma have four-year college degrees.
- Representation of African Americans in the construction industry is relatively low compared to all industries in Oklahoma, which is unexplained by amount of formal education.
- The representation of women in the construction industry as a whole is relatively low.
- There appear to be disparities in the advancement of Hispanic Americans to first-line supervisor positions.
- Relatively few Hispanic Americans and Native Americans working in construction are managers.

In sum, certain patterns of disparity seen nationally concerning entry and advancement in the construction and engineering industries are also present in Oklahoma.

APPENDIX E. Business Ownership in the Construction and Engineering Industries

About 10 percent of all Oklahoma workers were self-employed in 2008. The engineering industry had a comparable rate of business ownership at approximately 11 percent and the construction industry had a substantially higher rate at about 28 percent. Focusing on these industries, BBC examined business ownership for different race, ethnicity and gender groups in Oklahoma and the nation. This appendix includes both summary statistics and regression models to analyze determinants of business ownership in Oklahoma. "Self-employment" and "business ownership" are used as interchangeable terms in the following discussion.

Business Ownership Rates

Many studies have explored differences at the national level between minority and non-minority rates of business ownership. Although self-employment rates have increased for minorities and women over the years, a number of studies indicate that gender, ethnicity and race continue to affect opportunities for entrepreneurship. The extent to which such individual characteristics may limit ownership opportunities differs across industries and from state to state.

Disparities in rates of business ownership have been considered by state and federal courts when reviewing state DOT implementation of the Federal DBE Program. Any disparities in business ownership rates may be especially important when considering DBE participation goals. For example, research developed for the Illinois Department of Transportation (IDOT) considered disparities in self-employment rates as a factor in adjusting the base figure for the IDOT annual DBE goal.²

BBC used Public Use Micro-sample (PUMS) data from the 1980 and 2000 U.S. Census of Population and the 2008 American Community Survey (ACS) to study business ownership rates in the construction and engineering industries. This appendix presents industry-specific analyses for Oklahoma and the United States.

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See, for example, Waldinger, Roger and Howard E. Aldrich. 1990. Ethnicity and Entrepreneurship. Annual Review of Sociology. 111-135.; Fairlie, Robert W. and Bruce D. Meyer. 1996. Ethnic and Racial Self-Employment Differences and Possible Explanations. The Journal of Human Resources, Volume 31, Issue 4, 757-793.; Fairlie, Robert W. and Alicia M. Robb. 2006. Why are Black-Owned Businesses Less Successful than White-Owned Businesses? The Role of Families Inheritances, , and Business Human Capital. Forthcoming Journal of Labor Economics.; and Fairlie, Robert W. and Alicia M. Robb. 2006. Race, Families and Business Success: A Comparison of African-American-, Asian-, and White-Owned Businesses. Russell Sage Foundation.

² National Economic Research Associates, Inc. 2004. *Disadvantaged Business Enterprise Availability Study*. Prepared for the Illinois Department of Transportation.

Construction industry. Compared to other industries, construction typically has higher rates of business ownership among people working in the industry. In 2008, 10 percent of workers across all Oklahoma industries were self-employed — the business ownership rate in the Oklahoma construction industry was 28 percent. Figure E-1 shows the percentage of workers in the construction industry by race/ethnicity and gender who were self-employed in 1980, 2000 and 2008. It also shows corresponding sample sizes for each percentage shown in the figure.

Figure E-1.

Percentage of workers in the Oklahoma and U.S. construction industry who are self-employed, 1980, 2000 and 2008

					Sample size	
Oklahoma	1980	2000	2008	1980	2000	2008
Race/ethnicity						
African American	10.5 % **	14.0 % **	26.3 %	191	158	34
Hispanic American	5.1 **	8.6 **	15.4 **	79	405	121
Native American	15.9 **	24.4	31.9	327	834	166
Non-Hispanic white	25.5	30.8	30.3	4,473	4,649	960
Gender						
Female	13.6 % **	24.0 %	26.8 %	389	541	111
Male	24.8	28.0	28.0	4,690	5,536	1,176
All individuals	23.9 %	27.6 %	27.9 %	5,079	6,077	1,287
					Sample size	
United States	1980	2000	2008	1980	2000	2008
Race/ethnicity						
African American	9.0 % **	15.2 % **	18.5 % **	24,357	26,736	5,177
Hispanic American	10.6 **	12.2 **	15.3 **	19,590	66,495	19,207
Native American	10.6 **	19.3 **	21.6 **	2,571	7,633	1,515
Non-Hispanic white	19.4	25.4	27.1	281,094	371,025	78,977
Gender						
Female	9.8 % **	16.8 % **	17.6 % **	26,096	46,778	10,820
Male	18.7	23.3	24.2	304,368	433,502	96,217
All individuals	18.0 %	22.6 %	23.6 %	330,464	480,280	107,037

Note: ** Denotes that the difference in proportions between the minority and non-Hispanic white groups (or female and male groups) for the given Census/ACS year is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 1980 and 2000 U.S. Census 5% sample and 2008 ACS Public Use Micro-sample data. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

The following analysis focuses on business ownership rates in the Oklahoma construction industry in 2000 and 2008.

Business ownership rates in 2000. In 2000, approximately 31 percent of non-Hispanic whites working in the Oklahoma construction industry were self-employed (in incorporated or unincorporated businesses). Rates of business ownership for African Americans, Hispanic Americans, and Native Americans working in the construction industry in Oklahoma were lower than non-Hispanic whites.

- In 2000, about 14 percent of African Americans were self-employed, less than one-half the rate for non-Hispanic whites (a statistically significant difference).
- Roughly 9 percent of Hispanic Americans working in the construction industry in Oklahoma were self-employed, less than one-third the rate for non-Hispanic whites (also statistically significant).
- Native Americans owned construction industry businesses at a lower rate (24%) compared to non-Hispanic whites, but this difference is not statistically significant.

There were too few Asian-Pacific Americans and Subcontinent Asian Americans in the 2000 PUMS data to analyze business ownership rates in the Oklahoma construction industry.

Women owned businesses in Oklahoma at a rate of 24 percent compared to 28 percent for men. This difference is not statistically significant.

Similar differences in business ownership rates were found for the nation in 2000.

Changes in business ownership rates in Oklahoma since 2000. The 2008 ACS shows increases in business ownership rates since 2000 for most race/ethnicity groups in the Oklahoma construction industry; the rate of business ownership for non-Hispanic whites remained relatively stable.

- In 2008, the rate of business ownership among Native American construction workers in Oklahoma was similar to that for non-Hispanic white workers.
- The business ownership rate for women in the construction industry was nearly 27 percent in 2008, close to the rate observed for males.
- However, the self-employment rate for Hispanic Americans in the Oklahoma construction industry (15%) was still about one-half the rate for non-Hispanic whites (a statistically significant difference).

There are considerably fewer workers for each race/ethnic/gender group in the 2008 ACS dataset for Oklahoma compared to 2000 Census data, which limits the ability to accurately compare business ownership rates in 2008. For example, because there were only 34 African American construction workers in Oklahoma in the 2008 ACS data, one must be cautious in analyzing business ownership rates for this group for that year.

Engineering industry. Figure E-2 reports self-employment rates for people working in the engineering industry in Oklahoma and the nation. Because of small sample sizes for workers in the Oklahoma engineering industry, BBC combined minority groups when analyzing business ownership rates. Small sample sizes in the 2008 ACS precluded BBC from reporting 2008 results for Oklahoma.

Business ownership rates in 2000. In 2000, about 16 percent of non-Hispanic whites working in the Oklahoma engineering industry owned their businesses. About 4 percent of minorities working in the Oklahoma engineering industry in 2000 were self-employed (a statistically significant difference compared to non-Hispanic whites). The differences between minority and non-minority business ownership rates seen in Oklahoma in 2000 are larger than found for the nation as a whole.

During the same year, approximately 8 percent of females owned their own businesses compared to 16 percent of males in the Oklahoma engineering industry (not a statistically significant difference).

Figure E-2.

Percentage of workers in the engineering industry who are self-employed, Oklahoma and the U.S., 1980, 2000 and 2008

					Sample sizes	
Oklahoma	1980	2000	2008	1980	2000	2008
Race/ethnicity						
Minority	3.8 % **	3.9 % **	NA	26	67	NA
Non-Hispanic white	14.6	16.1	NA	288	351	NA
Gender						
Female	2.9 % **	8.4 %	NA	68	87	NA
Male	16.7	15.5	NA	246	331	NA
All individuals	13.7 %	14.0 %	NA	314	418	NA
					Sample sizes	
United States	1980	2000	2008	1980	2000	2008
Race/ethnicity						
Race/ethnicity Minority	7.5 % **	7.8 % **	7.3 % **	3,196	9,401	3,063
•	7.5 % ** 15.8	7.8 % ** 14.2	7.3 % ** 13.3	3,196 25,673	9,401 48,820	3,063 13,892
,		, , .		•	•	•
Minority Non-Hispanic white		, , .		•	•	•
Minority Non-Hispanic white Gender	15.8	14.2	13.3	25,673	48,820	13,892

Note: "Minority" includes African Americans, Hispanic Americans, Asian Pacific Americans, Subcontinent Asian Americans, Native Americans and other minority groups. Sample sizes for these race/ethnicity groups were too small to analyze individually.

The data presented in this table include all business owners in the engineering industry. The study team was unable to restrict the population to specific occupations due to small sample sizes.

Source: BBC Research & Consulting from 1980 and 2000 U.S. Census 5% sample and 2008 ACS Public Use Micro-sample data. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

^{**} Denotes that the difference in proportions between the minority and non-Hispanic white groups (or female and male groups) for the given Census/ACS year is statistically significant at the 95% confidence level.

Changes in business ownership rates in Oklahoma since 2000. While Figure E-2 does not include 2008 rates, analysis of these data indicates that ownership rates for non-Hispanic whites and males in the Oklahoma engineering industry continued to exceed those for minorities and females, respectively. This is consistent with trends in the national engineering industry, in which business ownership rates for minorities (7%) and females (8%) continued to be significantly lower in 2008 than those of non-Hispanic whites (13%) and males (14%).

Potential causes of differences in business ownership rates. Researchers have examined whether there are disparities in business ownership rates after consideration of other personal characteristics such as education and age. A number of studies have found that disparities in business ownership still exist when accounting for such neutral factors:

- Some studies have found that access to financial capital is a strong determinant of business ownership. Researchers have consistently found a positive relationship between start-up capital and business formation, expansion and survival.³ One study found that housing appreciation measured at the MSA level is a positive determinant of becoming self-employed.⁴ Unexplained differences still exist, however, when controlling for these factors.⁵
- Education has positive effects on the probability of business ownership in most industries. However, findings from multiple studies indicate that minorities are still less likely to own a business than their non-minority counterparts with the same levels of education.⁶
- Intergenerational links affect one's likelihood of self-employment. One study found that experience working for a self-employed family member increases the likelihood of business ownership for minority groups.⁷
- Studies have found that time since immigration and assimilation into American society are important determinants of self-employment, but unexplained differences in minority-business ownership still exist when accounting for these factors.

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³ See Lofstrom, Magnus and Chunbei Wang. 2006. Hispanic Self-Employment: A Dynamic Analysis of Business Ownership. Working paper, Forschungsinstitut zur Zukunft der Arbeit (Institute for the Study of Labor).; and Fairlie, Robert W. and Alicia M. Robb. 2006. Race, Families and Business Success: A Comparison of African-American-, Asian-, and White-Owned Businesses. Russell Sage Foundation.

⁴ Fairlie, Robert W. and Harry A. Krashinksy. 2006. Liquidity Constraints, Household Wealth and Entrepreneurship Revisited.

⁵ Lofstrom, Magnus and Chunbei Wang. 2006. *Hispanic Self-Employment: A Dynamic Analysis of Business Ownership*. Working paper, Forschungsinstitut zur Zukunft der Arbeit (Institute for the Study of Labor).

⁶ See Fairlie, Robert W. and Bruce D. Meyer. 1996. Ethnic and Racial Self-Employment Differences and Possible Explanations. The Journal of Human Resources, Volume 31, Issue 4, 757-793; and Butler, John Sibley and Cedric Herring. 1991. Ethnicity and Entrepreneurship in America: Toward an Explanation of Racial and Ethnic Group Variations in Self-Employment. Sociological Perspectives. 79-94.

⁷ See Fairlie, Robert W. and Alicia M. Robb. 2006. Race, Families and Business Success: A Comparison of African-American-, Asian-, and White-Owned Businesses. Russell Sage Foundation; and Fairlie, Robert W. and Alicia M. Robb. 2006. Why are Black-Owned Businesses Less Successful than White-Owned Businesses? The Role of Families, Inheritances, and Business Human Capital. Forthcoming Journal of Labor Economics.

A number of researches have determined that race, ethnicity and gender can affect opportunities for business ownership, even when taking account of other personal characteristics such as education, age and familial ties. To further examine this possibility, BBC developed multivariate statistical models to explore patterns of business ownership in Oklahoma. These models estimate the effect of race/ethnicity and gender on the probability of self-employment.

Business Ownership Regression Analysis

An extensive body of literature examines whether race- and gender-neutral factors such as access to financial capital, education, age, and family characteristics (e.g., marital status) help explain differences in business ownership. This subject has also been examined in other disparity studies. Prior studies in Minnesota⁹ and Illinois¹⁰ have conducted econometric analyses investigating whether disparities in business ownership among race/ethnicity and gender groups in the combined construction and engineering industry remain after controlling for other personal characteristics. These studies have incorporated probit econometric models using PUMS data from the 2000 Census and have been among materials submitted to courts in subsequent litigation concerning state implementation of the Federal DBE Program.

BBC used similar probit regression models to predict business ownership from multiple independent or "explanatory" variables. 11 Independent variables include:

- Personal characteristics potentially linked to the likelihood of business ownership (age, age-squared, marital status, number of children and elderly people in the household, English-speaking ability and disability status);
- Indicators of educational attainment;
- Measures and indicators related to personal financial resources and constraints (home ownership, home value, monthly mortgage payment, dividend and interest income and additional household income from a spouse or unmarried partner); and
- Variables representing the race/ethnicity and gender of the individual.

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⁸ See Fairlie, Robert W. and Bruce D. Meyer. 1996. Ethnic and Racial Self-Employment Differences and Possible Explanations. The Journal of Human Resources, Volume 31, Issue 4, 757-793; and Butler, John Sibley and Cedric Herring. 1991. Ethnicity and Entrepreneurship in America: Toward an Explanation of Racial and Ethnic Group Variations in Self-Employment. Sociological Perspectives. 79-94.

⁹ National Economic Research Associates, Inc. 2000. *Disadvantaged Business Enterprise Availability Study*. Prepared for the Minnesota Department of Transportation.

¹⁰ National Economic Research Associates, Inc. 2004. *Disadvantaged Business Enterprise Availability Study*. Prepared for the Illinois Department of Transportation.

Probit models estimate the effects of multiple independent or "predictor" variables in terms of a single, dichotomous dependent or "outcome" variable — in this case, business ownership. The dependent variable is binary, coded as "1" for individuals in a particular industry who are self-employed; "0" for individuals who are not self-employed. The model enables estimation of the probability that a worker in a given estimation sample is self-employed. The study team excluded observations where the Census Bureau had imputed values for the dependent variable, business ownership.

BBC developed two separate models using 2000 PUMS data:

- A probit regression model for the Oklahoma construction industry, which included 5,155 observations; and
- A probit regression model for the West South Central (WSC) region engineering industry, which included 5,448 observations.

The engineering industry model differs slightly in form from the construction industry model as it examines a larger geographic area. Due to the small sample size for the Oklahoma engineering industry, BBC developed a model using observations from the four states which comprise the WSC region: Arkansas, Louisiana, Oklahoma and Texas. All WSC region workers are included in the model and any Oklahoma effects are estimated by including state-level control variables. (BBC used a similar approach when analyzing SSBF data on business credit in Appendix G.) The state-level variables included an indicator variable for Oklahoma workers as well as "interaction" terms for minorities and women living in the state.

Results specific to the Oklahoma construction industry. Figure E-3 presents the coefficients and t-statistics for the 2000 probit model for individuals working in the Oklahoma construction industry.

The model indicates factors important to predicting the probability of business ownership in this industry:

- Older individuals are more likely to be business owners in the Oklahoma construction industry, but this marginal effect declines for the oldest individuals;
- More children living in the household increases the likelihood of being self-employed;
- Home ownership and higher home values are both associated with greater likelihood of business ownership; and
- Speaking English well increases construction industry workers' probability of selfemployment.

Even after controlling for neutral factors, statistically significant disparities in rates of business ownership remain for African Americans, Hispanic Americans, Native Americans and women working in the Oklahoma construction industry.

Figure E-3.
Oklahoma construction industry business ownership model, 2000

Variable	Coefficient	t-statistic
Constant	-2.9958	-8.83 **
Age	0.0578	4.82 **
Age-squared	-0.0004	-3.06 **
Married	0.0973	1.58
Disabled	0.0692	0.93
Number of children in household	0.0743	3.13 **
Number of people over 65 in household	0.0586	0.73
Owns home	0.1622	2.48 **
Home value (\$000s)	0.0002	4.64 **
Monthly mortgage payment (\$000s)	-0.0065	-0.78
Interest and dividend income (\$000s)	0.0002	0.59
Income of spouse or partner (\$000s)	0.0000	-0.06
Speaks English well	0.5504	2.38 **
Less than high school education	0.0345	0.56
Some college	0.0830	1.42
Four-year degree	-0.0451	-0.41
Advanced degree	0.0578	0.28
African American	-0.4839	-3.19 **
Hispanic American	-0.3850	-3.09 **
Native American	-0.1251	-1.75 *
Other minority group	0.4482	1.56
Female	-0.3257	-3.87 **

Note: *,** Denote statistical significance at the 90% and 95% confidence levels, respectively.

 $Source: \quad BBC \ Research \ \& \ Consulting \ based \ on \ analysis \ of \ 2000 \ Census \ 5\% \ Public \ Use \ Micro-sample \ data.$

The probit modeling approach allows for simulation of business ownership rates for minorities and females if they had the same probability of self-employment as similarly situated non-Hispanic whites and males, repectively. To conduct this next step in the analysis, BBC performed a probit regression predicting business ownership using only non-Hispanic white construction workers in the dataset. BBC then applied the coefficients from this version of the model to the mean characteristics of minorities in the 2000 Census dataset to estimate the probability of business ownership in the absence of any race/ethnic differences in the likelihood of self-employment. BBC performed these calculations for only those groups with statistically significant disparities in business ownership (as shown in Figure E-3). BBC constructed a similar model for just men (who are non-Hispanic white) to predict business ownership rates for non-Hispanic white women.

¹² This version of the model excludes the race/ethnicity indicator variables since the value for all of those variables would be the same.

BBC Research & Consulting

Figure E-4 shows these simulated ("benchmark") business ownership rates, comparing them to the actual, observed mean probability of business ownership for African Americans, Hispanic Americans, Native Americans and white females. Similar simulation approaches have been incorporated in other disparity studies reviewed by the courts.

Figure E-4.

Comparison of actual construction business ownership rates in Oklahoma to simulated rates, 2000

_	Self-empl	oyment rate	Disparity index
Group	Actual	Benchmark	(100 = parity)
African American	14.2%	26.4%	54
Hispanic American	9.3%	15.9%	59
Native American	24.4%	28.2%	86
White female	22.0%	35.6%	62

Note: As the benchmark figure can only be estimated for records with an observed dependent variable, comparison is made with only this subset of the sample. For this reason, actual self-employment rates may differ slightly from those in Figure E-1.

Source: BBC Research & Consulting from statistical models of 2000 Census of Population data.

The actual rate of self-employment for African Americans in 2000 is 54 percent of what is predicted after controlling for other characteristics (disparity index of 54). These results suggest that there were about one-half as many African American-owned construction businesses in Oklahoma as one would anticipate if African American workers owned businesses at the same rate as similarly situated non-Hispanic whites.¹³ There are also appear to be considerably fewer Hispanic American-owned businesses than would be expected based on business ownership rates for non-Hispanic whites with a similar demographic profile.

The disparity between actual and "benchmark" self-employment rates was smaller for Native Americans working in the Oklahoma construction industry in 2000 (disparity index of 86).

Comparing actual self-employment rates of non-Hispanic white women with a benchmark based on business ownership rates of non-Hispanic white men, there were about 62 percent as many white female-owned businesses as would be expected. (To focus on the effects of gender, BBC's analysis compares actual and predicted rates for non-Hispanic white women.)

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¹³ The actual comparison is between African American men and non-Hispanic white men. Results for other minority groups also compare the rates for minority men and non-Hispanic white men.

Results specific to the Oklahoma engineering industry. Factors associated with self-employment may differ between the construction and engineering industries. Therefore, BBC developed a separate business ownership model for the engineering industry. Due to small sample sizes for Oklahoma, the study team used 2000 Census data from the West South Central region (which includes Oklahoma) to develop this model.

Figure E-5 presents results from the 2000 WSC engineering model.

Figure E-5.
West South Central engineering industry business ownership model, 2000

Variable	Coefficient	t-statistic
Constant	-3.4192	-7.59 **
Age	0.0583	3.77 **
Age-squared	-0.0003	-1.92 *
Married	-0.0965	-1.35
Disabled	-0.1859	-1.90 *
Number of children in household	0.0747	2.76 **
Number of people over 65 in household	0.0871	1.17
Owns home	0.0890	1.04
Home value (\$000s)	0.0014	5.16 **
Monthly mortgage payment (\$000s)	-0.1059	-2.02 **
Interest and dividend income (\$000s)	0.0021	1.26
Income of spouse or partner (\$000s)	0.0011	1.55
Speaks English well	0.0207	0.07
Less than high school education	0.2564	1.41
Some college	0.1394	1.48
Four-year degree	0.3690	3.99 **
Advanced degree	0.3469	3.22 **
African American	-0.5808	-3.02 **
Hispanic American	-0.2301	-2.14 **
Native American	0.1314	0.45
Other minority group	-0.5488	-3.50 **
Female	-0.2194	-3.05 **
Native American in Oklahoma	-0.5502	-1.21
Female in Oklahoma	-0.1488	-0.56
Oklahoma	0.0937	0.85

Note: *,** Denote statistical significance at the 90% and 95% confidence levels, respectively.

Interaction terms representing African Americans, Hispanic Americans and other minorities in Oklahoma were dropped from the model due to small sample sizes.

Source: BBC Research & Consulting based on analysis of 2000 Census Public Use Microdata Sample.

The following neutral factors are important in predicting business ownership for the engineering industry in the West South Central region in 2000 (and are statistically significant):

- Older individuals are more likely to be business owners, but as with the construction industry, this marginal effect declines for the oldest individuals;
- Having more children in the household increases the probability of business ownership;
- Individuals who have a disability are less likely to be self-employed;
- Higher home values (for homeowners) are associated with a greater likelihood of business ownership;
- Larger mortgage payments are associated with lower rates of self-employment; and
- Having a four-year or advanced degree increases the likelihood of owning a business.

After accounting for neutral factors, the WSC engineering model indicates statistically significant disparities in the business ownership rates for African-Americans, Hispanic Americans, other-race minorities and females working in engineering.

The indicator variable for Oklahoma and the interaction terms for minority- and female-workers are not statistically significant. This result implies that the probabilities of business ownership for minorities and females (and non-minorities) within the state are not significantly different from the region as a whole. ¹⁴

As with the construction industry, BBC simulated engineering business ownership rates for different race/ethnicity and gender groups in the WSC engineering industry. Figure E-6 shows simulated self-employment rates and compares them to the actual, observed mean probability of business ownership for groups showing statistically significant differences.

Figure E-6.
Comparison of actual engineering business ownership rates to simulated rates,
West South Central region, 2000

_	Self-empl	oyment rate	Disparity index
Group	Actual	Benchmark	(100 = parity)
African American	3.1%	9.7%	32
Hispanic American	6.3%	9.5%	66
Other minority	5.4%	15.0%	36
White female	9.5%	12.6%	75

Note: As the benchmark figure can only be estimated for records with an observed dependent variable, comparison is made with only this subset of the sample. For this reason, actual self-employment rates may differ slightly from those in Figure E-2.

Source: BBC Research & Consulting from statistical models of 2000 Census of Population data.

¹⁴ Where sample sizes were very small, interaction terms for minority groups for the Oklahoma engineering industry have been excluded from the model.

Results suggest that in the West South Central region (which includes Oklahoma):

- African Americans experience large disparities in business ownership rates in the engineering industry. About 32 percent as many African Americans were owners of engineering firms in the region compared to what would be predicted if African Americans owned firms at the same rate as similarly situated non-Hispanic whites.
- If they owned businesses at the same rate as similarly situated non-Hispanic whites, other-race minorities would have a self-employment rate nearly three times the observed rate of 5 percent.
- The observed business ownership rate for Hispanic Americans was roughly two-thirds the expected rate if Hispanic Americans owned businesses at the same rate as similarly situated non-Hispanic whites.
- BBC identified similar disparities in business ownership for white women working in engineering within the West South Central region. The disparity index of 75 indicates that white women working in the industry own engineering firms at three-quarters the rate of similarly situated white men.

Consistent with other research, the statistical modeling indicates that race, ethnicity and gender appear to affect rates of business ownership even after controlling for neutral factors.

Summary of Business Ownership in the Construction and Engineering Industries

At the time of this report, the 2000 Census provides the most extensive data business ownership data for the construction and engineering industries. Unless otherwise noted, this summary focuses on these data, which provide the highest level of accuracy and detail.

In 2000, disparities in business ownership were present in the Oklahoma construction industry:

- The business ownership rate for African Americans was less than one-half that of non-Hispanic whites.
- Hispanic Americans owned businesses at a rate less than one-third that of non-Hispanic whites.
- Lower business ownership rates existed for Native Americans compared to non-Hispanic whites and for women compared to men, although these differences are not statistically significant.

Note that there is some evidence of convergence in business ownership rates between minority and non-minority workers in the Oklahoma construction industry. This narrowing may also be occurring for women and men. As the U.S. Census Bureau collects additional data for recent years, one can further explore whether disparities in business ownership rates in the Oklahoma construction industry are still apparent.

Disparities were also found in the Oklahoma engineering industry in 2000:

- The business ownership rate for minorities was one-fourth the rate for non-Hispanic whites.
- Women working in the engineering industry were less likely to be self-employed than men, but the difference was not statistically significant.

BBC used probit regression models to investigate the presence of race/ethnicity and gender disparities in business ownership in Oklahoma after accounting for the effects of neutral factors. Statistically significant disparities in business ownership rates were found in the Oklahoma construction industry for African Americans, Hispanic Americans, Native Americans and women. BBC identified statistically significant disparities in ownership rates for engineering in the West South Central region for African Americans, Hispanic Americans, "other minority" groups and women.

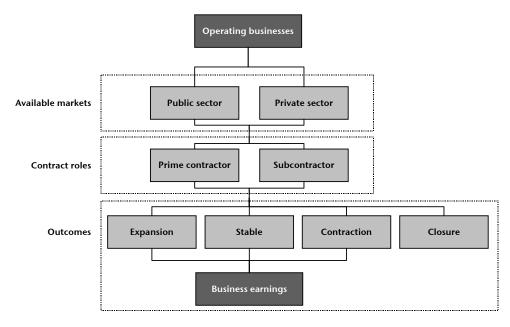
APPENDIX F. Success of Businesses in the Construction and Engineering Industries

BBC also examined the relative success of MBE/WBEs once they are operating, assessing whether business outcomes for minority- and women-owned construction and engineering firms differ from those of majority-owned firms. BBC researched outcomes for MBE/WBEs and majority-owned businesses in terms of:

- Participation in public versus private sector markets;
- Participation as prime contractors and subcontracts;
- Sizes of contracts bid on and performed;
- Businesses discontinuing operations;
- Businesses expanding or contracting;
- Business receipts and earnings; and
- Size distribution of gross revenue.

This analysis examines whether some of the patterns of disparities in outcomes for minority- and women-owned businesses found by Congress in the U.S. are also found in Oklahoma. Figure F-1 provides a framework for the analysis.

Figure F-1.
Business success



Source: BBC Research & Consulting.

BBC begins this section by examining data collected from interviews with Oklahoma businesses as part of the study team's availability analysis. Firms were asked whether they had bid on and won public sector and private sector work in the Oklahoma transportation contracting industry. The study team also asked business owners and managers whether they had worked as prime contractors, as subcontractors, or as both. Size of projects firms bid on or performed is also examined

BBC then turns to federal data for Oklahoma and the nation concerning business closures, expansion and contraction. Using federal data and information collected from the availability interviews, BBC concludes this appendix with an analysis of business earnings.

Markets and Contract Roles

As part of the disparity study, availability interviews were performed by telephone with transportation construction and engineering firms in Oklahoma. The study team conducted interviews with local businesses in late 2009 and early 2010. Results provide information on public and private sector work, prime and subcontracts, and past bidding success. Data on largest contracts received were also examined. Firm owners and managers were also asked about potential difficulties in the marketplace. Appendix C describes the interview methodology in detail. (Annual revenue data are examined at the end of Appendix F.)

Results examined from the availability interviews pertain to businesses with Oklahoma locations reporting that they work within the local transportation construction industry.¹

The following charts present data for MBEs, WBEs and majority-owned firms:

- Because of the relatively small number of firms for specific minority groups, BBC reports results from the availability interviews in aggregate for minority-owned firms ("MBE," whether or not they are certified as such).
- Responses for white women-owned firms are shown as "WBE." (Results for minority women-owned firms are reported under MBE.)
- "Majority-owned firms" are all firms not owned or controlled by minorities or women.

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Firms must have reported that they work or provides materials related to construction, maintenance or design of roads and highways. Only businesses or tribally-owned organizations are examined.

Public versus private sector work. BBC examined whether minority- and women-owned firms involved in transportation work were less likely to work in the private sector than the public sector.

The study team separately examined responses for firms in construction subindustries (including supply and trucking specializations) and firms in engineering and professional services subindustries (including engineering firms and related businesses). Results indicate whether a firm had pursued government or private sector work.²

BBC also examined whether a firm had bid on or been awarded any part of a project in the private sector.³

Construction firms. The pie charts in Figure F-2 portray the relative share of all firms competing for government and private sector prime contracts and subcontracts based on responses from firms in the availability interviews.

- Of 135 the transportation construction industry firms that reported bidding on public sector prime contracts in the past five years, 73 percent are majority-owned, 12 percent are MBEs and 16 percent are WBEs. The share of firms bidding as primes that are MBE/WBEs is about the same for private sector work.
- Among 216 respondents competing for public sector subcontracts (or work as suppliers or truckers), 69 percent of the firms are majority-owned, 16 percent are MBEs and 16 percent are WBEs. As shown in the Figure 2 subcontract charts, there is little difference in results for public sector and private sector work.

The telephone interview results for firms in the transportation construction industry indicate little difference in any public versus private sector specialization between MBE/WBEs and majority-owned firms.

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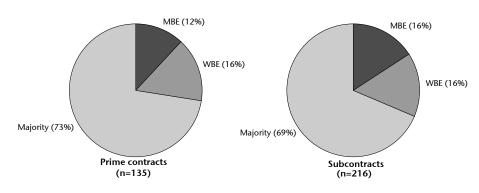
² A firm was deemed to have performed or bid on public sector work if it answered "yes" to either of the following questions: (a) "Next, I have a few questions about your company's role in construction, maintenance or design work related to roads and highways. During the past five years, has your company submitted [a bid || qualifications || a proposal] or a price quote to any part of a state or local government project in Oklahoma?" and (b) "During the past five years, has your company received an award for work [as a prime contractor or as a subcontractor || as a prime consultant or as a subconsultant] to any part of a state or local government project in Oklahoma?"

³ A firm was deemed to have performed or bid on private sector work if it answered "yes" to either of the following questions: (a) "Again thinking about construction, maintenance or design work related to roads and highways during the past five years, has your company submitted [a bid || qualifications, a proposal] or a price quote for any part of a private sector contract in Oklahoma?" and (b) "During the past five years, has your company received an award for work as a [prime contractor or as a subcontractor] [prime consultant or as a subconsultant] for any part of a private sector contract in Oklahoma?"

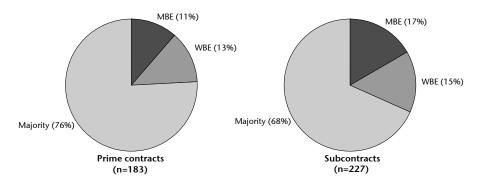
Figure F-2.

MBE and WBE share of transportation construction industry firms bidding on different types of work in Oklahoma in the past 5 years

Government contracts



Private sector contracts



Note: "WBE" represents white women-owned firms.

Total may not add to 100 percent due to rounding.

Source: BBC Research & Consulting from 2009 and 2010 Availability Interviews.

Firms competing for public sector work in Oklahoma were also asked if they had been awarded any public sector contracts (including both prime contracts and subcontracts or supply/trucking work). When asked to consider the past five years, three-quarters of MBE/WBE construction firms bidding on public sector work reported that they had been successful in obtaining some work. This percentage was about the same for majority-owned construction firms bidding in the public sector (78%).

About three-quarters of MBE/WBEs that reporting bidding on private sector work indicated that they had received such work. However, among transportation construction firms bidding on private sector work, relatively more majority-owned firms (86%) had received private sector prime contractors or subcontracts.

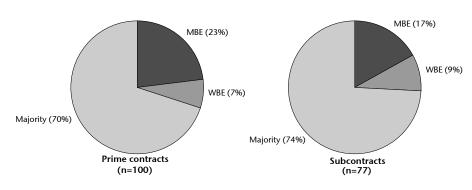
Engineering firms. As with transportation construction firms, the study team analyzed the relative share of engineering industry firms competing for public and private sector prime contracts and subcontracts. These results are based on counts of firms reporting that they compete for each type of work from BBC's availability interviews.

- As shown in Figure F-3, MBE/WBEs comprise 30 percent of engineering industry firms competing for public sector prime consulting contracts and 23 percent of the firms competing for private sector prime contracts. MBE/WBE engineering firms are more likely than majority-owned firms to have competed for public sector prime construction contracts.
- When examining engineering firms competing for subcontracts, about one-quarter are MBE/WBEs for public sector and 23 percent are MBE/WBE for private sector work. This is relatively lower than the proportion of MBE/WBEs that had bid on construction subcontracts.

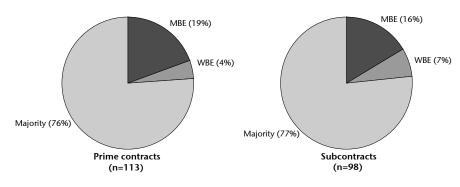
Figure F-3.

MBE and WBE share of transportation engineering industry firms proposing on different types of work in Oklahoma in the past five years

Government contracts



Private sector contracts



Note: "WBE" represents white women-owned firms.

Total may not add to 100 percent due to rounding.

Source: BBC Research & Consulting from 2009 and 2010 Availability Interviews.

As with construction firms, transportation engineering firms competing for public sector and private sector work were asked if they had received any such work in the past five years. Among MBE/WBEs competing for public sector work, 78 percent indicated that they had received some such work. However, 85 percent of majority-owned firms bidding on public sector work had received some work.

There was little difference between MBE/WBEs and majority-owned engineering firms' success in receiving at least some private sector work — more than 90 percent of all firms bidding on such work had received at least some private sector prime contracts or subcontracts.

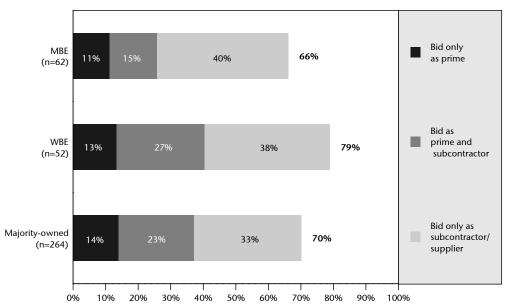
Bidding as prime contractors and subcontractors/suppliers. Figures F-4 through F-7 indicate that MBE/WBE construction firms are somewhat less likely to bid as a prime contractor than majority-owned firms. MBE/WBE engineering firms were more likely to bid as prime consultants than majority-owned firms. The following analysis, also drawn from availability interview data, further explores these questions.

Construction firms. Figure F-4 examines the share of Oklahoma construction firms in the availability analysis that reported bidding on public sector work as a prime contractor or as a subcontractor, including the share that had bid on both prime and sub work.

- Approximately 66 percent of minority-owned transportation construction firms reported bidding on government work as a prime or a subcontractor, supplier or trucker in the past five years (including submitting price quotes). This is relatively lower than the proportion of both WBEs and majority-owned firms that reported bidding on such work. About 26 percent had bid as a prime contractor (including those that had bid as both a prime and a sub). About 40 percent had bid only as a subcontractor.
- WBEs were more likely to have bid on public sector construction work than both MBEs and majority-owned firms. WBEs (30%) were more likely to bid as a prime contractor than MBEs.
- Majority-owned firms (37%) were more likely to bid as on public sector prime construction contracts than MBEs. They were less likely than both MBEs and WBEs to bid only as a subcontractor on such work.

Figure F-4.

Percent of transportation construction firms that reported submitting a bid for any part of a government project in the past 5 years



Note: WBE is white women-owned firms.

Source: BBC Research & Consulting from the 2009 and 2010 Availability Interviews.

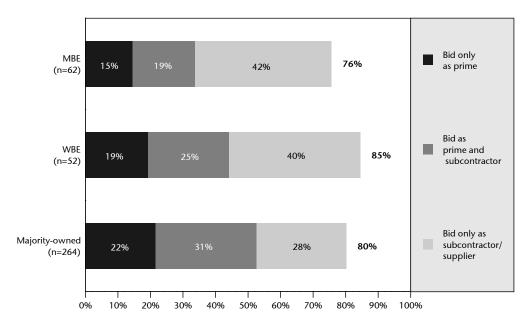
Telephone interviewers also asked firm owners and managers if the firm had bid as a prime or subcontractor on a private sector transportation project in the past five years.

- About 34 percent of MBEs had bid as a prime on private sector work, considerably less than what was found for both WBEs and majority-owned construction firms. More than 40 percent of MBEs had bid only as a subconsultant.
- Relatively more WBEs (44%) than MBEs had bid on prime contracts. WBEs were less likely than MBE construction firms to have bid only as a subcontractor or supplier.
- Among majority-owned transportation construction firms, 53 percent had bid as a prime on a private sector project within the past five years. Considerably fewer majority-owned firms (28%) than MBE/WBEs had bid only as a subconsultant.

For both public and private sector work, MBE/WBE transportation construction firms were more likely than majority-owned firms to have bid only as subcontractors or supplier, and less likely than majority-owned firms to have bid as primes.

Figure F-5.

Percent of transportation construction firms that reported submitting a bid for any part of a private sector project in the past 5 years



Note: WBE is white women-owned firms.

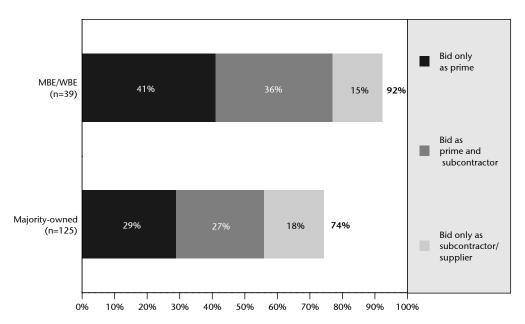
Source: BBC Research & Consulting from 2009 and 2010 Availability Interviews.

Engineering firms. Figures F-6 and F-7 examine prime versus subcontracting bidding for engineering firms using data from the availability interviews. Responses of MBEs and WBEs were combined due to the relatively small number of respondents (28 MBEs and 11 WBEs).

- As shown in Figure F-6, 56 percent of majority-owned engineering firms reported that they had bid or proposed on a public sector prime contract in the past five years. About 18 percent had bid only as a subconsultant.
- Relatively more MBE/WBEs engineering firms (77%) had bid as a prime consultant on public sector contracts than majority-owned firms. Fewer had bid only as a subconsultant.

Figure F-6.

Percent of transportation engineering industry firms that reported submitting a bid for any part of a government project in the past 5 years



Note: WBE is white women-owned firms.

Source: BBC Research & Consulting from the 2009 and 2010 Availability Interviews.

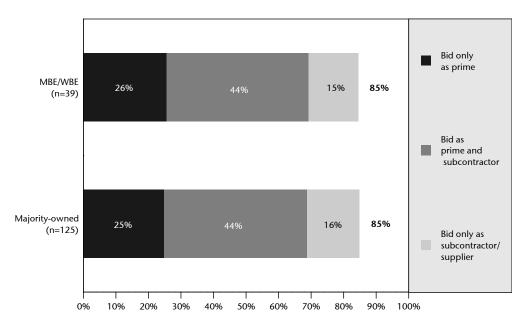
Figure F-7 includes results for transportation engineering firms bidding on private sector work.

- More than two-thirds of majority-owned firms had bid or proposed on private sector work as a prime consultant. Only 16 percent of majority-owned engineering firms had bid only as a subconsultant on private sector work.
- Results for MBE/WBE engineering firms bidding on private engineering work were similar to those for majority-owned firms.

Among transportation engineering firms, there is little evidence from the availability interviews that MBE/WBEs in Oklahoma are less likely than majority-owned firms to have bid or proposed as a prime consultant. In addition, relatively few MBE/WBEs or majority-owned transportation engineering firms bid solely as a subconsultant on public or private sector work.

Figure F-7.

Percent of transportation engineering industry firms that reported submitting a bid for any part of a private sector project in the past 5 years



Note: WBE is white women-owned firms.

Source: BBC Research & Consulting from the 2009 and 2010 Availability Interviews.

Largest transportation-related contract. As part of the availability interviews, the study team asked firms to identify the largest transportation-related contract the company was awarded in Oklahoma in the past five years. MBEs and WBEs have been combined for both construction and engineering firms due to the relatively small number of respondents.

Construction firms. Among construction firms in the availability interviews, 42 percent of majority-owned construction firms had received a prime contract or subcontract of \$0.5 million or more, considerably more than the relative number of MBE/WBEs (25%) firms that had received work of this size. As illustrated in Figure F-8, the largest transportation-related contract for MBE/WBEs tended to be smaller than for majority-owned construction firms.

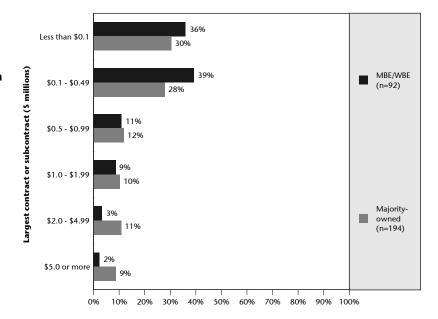
Figure F-8.
Largest transportationrelated contract or
subcontract that the
company was awarded in
Oklahoma in the past 5
years, transportation
construction firms

Note:

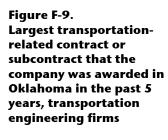
WBE is white women-owned firms.

Source:

BBC Research & Consulting from 2009 and 2010 Availability Interviews.



Engineering firms. Among engineering firms in the availability interviews, 31 percent of majority-owned firms had received a prime contract or subcontract of \$0.5 million or more, relatively more than the number of MBE/WBEs (27%) firms that had received work of this size. MBE/WBEs did receive relatively more contracts of \$5 million or more than majority-owned firms. Figure F-9 shows that results for contracts under \$0.5 million were similar for MBE/WBEs and majority-owned firms.

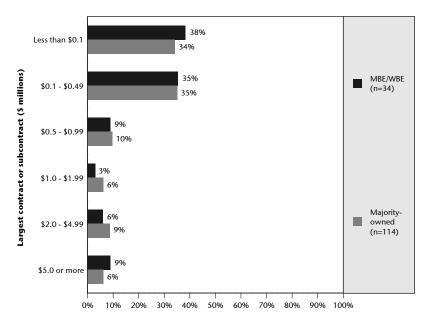


Note:

WBE is white women-owned firms.

Source

BBC Research & Consulting from 2009 and 2010 Availability Interviews.

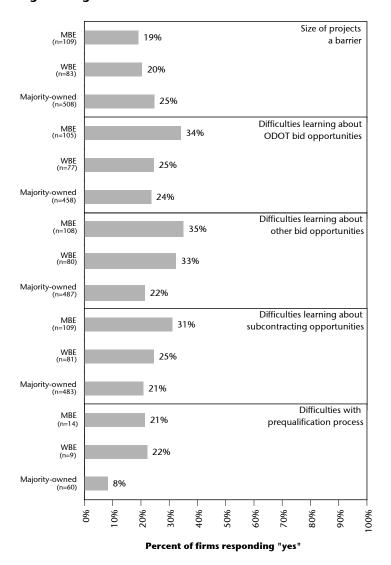


Results concerning potential barriers in the local marketplace. The study team asked firm owners and managers responding to the availability interviews if they had experienced barriers or difficulties associated with starting or expanding a business. BBC asked if:

- The size of projects had presented a barrier to bidding;
- The firm had experienced difficulties learning about bid opportunities with ODOT;
- The firm had experienced difficulties learning about bid opportunities with local governments or private companies;
- The firm had experienced difficulties learning about subcontracting opportunities in Oklahoma; and
- The prequalification process for ODOT work had presented difficulties for the firm.

Figure F-12 summarizes responses to these questions. Responses for construction and engineering firms have been combined.

Figure F-12.
Responses to 2010 availability interview questions with transportation construction and engineering firms



Note: "WBE" represents white women-owned firms, "MBE" represents minority-owned firms and "Majority-owned" represents non-Hispanic white male-

owned firms.

Source: BBC Research & Consulting

As shown in Figure F-12, MBEs and WBEs were less likely than majority-owned firms to report that the size of projects had been a barrier to bidding. MBEs and WBEs were more likely than majority-owned firms to report difficulties learning about:

- ODOT bid opportunities
- Other bid opportunities; and
- Subcontracting opportunities.

Minority- and white female-owned firms appeared to be more likely than majority-owned firms to report difficulties with the prequalification process, but the number of respondents for this question was small.

BBC also asked questions related to access to capital, bonding and insurance; Appendix G reports results.

Summary of public versus private sector and prime versus subcontracting analyses.

The availability interviews revealed some similarities and some differences between MBE/WBEs and majority-owned firms related to public versus private sector work:

- The telephone interview results for firms in the transportation construction industry found no indication that MBE/WBEs are less likely to have pursued work in the private sector than the public sector. MBE/WBEs that had bid on public and private sector work were also about as successful in obtaining work as majority-owned firms.
- The telephone interviews indicate that majority-owned firms were more successful in obtaining public sector PTE work compared to MBE/WBEs.
- Relatively more MBE/WBE engineering firms reported pursuing prime contracts in the public sector than found for majority-owned engineering firms. MBE/WBE and majority-owned firms were nearly equally likely to have bid or proposed on private sector prime contracts. There is some evidence that MBE/WBE engineering firms bidding on public sector prime contracts or subcontracts were not as successful in obtaining at least some public sector work as majority-owned firms.
- Relatively more MBE/WBEs than majority-owned firms indicated difficulty in learning of bid opportunities, including subcontracting opportunities and opportunities with ODOT.

BBC identified some differences in bidding as primes versus subcontractors/suppliers between MBE/WBE and majority-owned construction firms, but not for engineering firms:

- For both public and private sector work, MBE transportation construction firms were more likely than majority-owned firms to have only bid as subcontractors or supplier, and less likely than majority-owned firms to have bid as primes. Only for private sector work were WBEs less likely than majority-owned construction firms to have bid as prime contractors.
- Among transportation engineering firms, there is no evidence from the availability interviews that MBE/WBEs in Oklahoma are less likely than majority-owned firms to have bid or proposed as a prime consultant. In addition, relatively few MBE/WBEs or majority-owned transportation engineering firms bid solely as a subconsultant on public or private sector work.

Among available construction firms, relatively more majority-owned firms than MBE/WBEs had received contracts or subcontracts of at least \$0.5 million in size. There was little difference in largest contract size for MBE/WBE and majority-owned transportation engineering firms.

Businesses Closures, Expansions and Contractions

Having examined different markets for work, Appendix F now turns to different outcomes for businesses: closures, expansion and contraction. BBC used U.S. Small Business Administration (SBA) analyses to examine outcomes for minority- and women-owned firms in Oklahoma and the nation. The SBA analyses pertain to minority-owned firms, by group, in comparison with all firms.

Business closure. High rates of business failures may reflect adverse business conditions faced by minority business owners.

Rates of business closures in Oklahoma. BBC explored possible data sources that might indicate whether MBEs were more likely to close than other firms. Using data on firms first surveyed in the 1997 Survey of Minority- and Women-Owned Business Enterprises conducted by the U.S. Census Bureau, the U.S. Small Business Administration (SBA) reported on employer firm survival rates for minority-owned businesses between 1997 and 2001 across sectors of the economy ("employer firms" are firms with paid employees other than the business owner and family members). The SBA report examined patterns in each state.

Figure F-13 shows that 42 percent of Native American-owned firms in Oklahoma in 1997 had closed by 2001, a rate higher than other groups. Hispanic American- and African American-owned firms also had above-average closure rates during this time, while closure rates for Asian American-owned firms were close to the average. Firm closure rates for Hispanic- and Native American-owned firms appear to be higher in Oklahoma than in the nation as a whole.

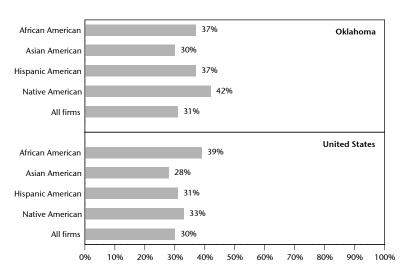
Figure F-13.
Rates of firm closure 19972001, Oklahoma and the
U.S.

Note:

Data refer only to employer firms. As sample sizes are not reported, statistical significance of these results cannot be determined; however, statistics are consistent with SBA data quality guidelines.

Source:

Lowrey, Ying. 2005. "Dynamics of Minority-Owned Employer Establishments, 1997-2001." U.S. Small Business Administration Office of Advocacy. Washington, D.C.



Rates of business closures for construction firms. The data shown in Figure F-14 compare national rates of closure for construction firms to national rates of closure for all firms. The higher closure rate for Native American- and African American-owned firms was also present when only examining construction firms. Closure rates also appeared to be above average for construction firms owned by Asian Americans.

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⁴ Lowrey, Ying. 2005. "Dynamics of Minority-Owned Employer Establishments, 1997-2001." U.S. Small Business Administration Office of Advocacy. Washington D.C.

Results from the 2007 SBO will be available by the end of 2010.

No statistics were available from this data source for engineering firms. The SBA analysis by industry is not available for Oklahoma.

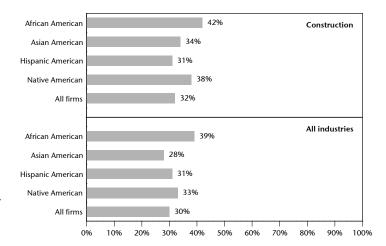
Figure F-14.
Rates of firm closure 1997-2001, construction and all industries in the U.S.

Note:

Data refer only to employer firms. As sample sizes are not reported, statistical significance of these results cannot be determined; however, statistics are consistent with SBA data quality guidelines.

Source

Lowrey, Ying. 2005. "Dynamics of Minority-Owned Employer Establishments, 1997-2001." U.S. Small Business Administration Office of Advocacy. Washington, D.C.



Successful versus unsuccessful closures. Not all firm closures can be interpreted as a "failure" of the business. Reasons that a firm may close "successfully" include owner retirement or the emergence of a more profitable business alternative.

To date, the 1992 Characteristics of Business Owners Survey (CBO) is the only dataset released by the Census Bureau that classifies firm closures into successful and unsuccessful subsets. The CBO survey, administered in 1996, asked owners of businesses that had closed between 1992 and 1995 the question, "Which item below describes the status of this business at the time the decision was made to cease operations?" Only the responses "successful" and "unsuccessful" were permitted. A firm reported to be unsuccessful at time of closure is understood to be a firm failure. Figure F-15 shows comparative data for the proportion of firms in the U.S. closing between 1992 and 1995 that failed.

According to the CBO, closed African American-owned construction firms were the most likely to report "unsuccessful" when asked about the status of the business when it closed. About 82 percent of the African Americans who had owned and closed construction firms reported an unsuccessful business or business status (77% for all African American business owners who had closed businesses). Only 58 percent of non-minority men who had owned construction businesses said that their business was unsuccessful at time of closing, a substantial disparity. The differences in status of a construction firm at closing were also large between other minorities (Asian Americans and Native Americans) and non-minority men.

⁶ CBO data from the 1997 and 2002 Economic Censuses do not include statistics on successful and unsuccessful closure. To date, the 1992 CBO is the only U.S. Census dataset that does.

⁷ All CBO data should be interpreted with caution due to the fact that firms that did not respond to the survey cannot be assumed to have the same characteristics of ones that did. This report does not include CBO data on overall firm closure rates because firms not responding to the survey were found to be much more likely to have closed than ones that did. Holmes, Thomas J. and James Schmitz. 1996. "Nonresponse Bias and Business Turnover Rates: The Case of the Characteristics of Business Owners Survey." *Journal of Business & Economic Statistics*. 14(2): 231-241.

This study includes CBO data on firm success because there is no compelling reason to believe that closed firms responding to the survey would have reported different rates of success/failure than those closed firms that did not respond to the survey. Headd, Brian. U.S. Small Business Administration, Office of Advocacy. 2000. Business Success: Factors leading to surviving and closing successfully. Washington D.C.: 12.

Differences in the successful versus unsuccessful closing of construction firms were only somewhat narrower for other groups:

- About 71 percent of Hispanic Americans who had owned and closed construction businesses reported the business to be unsuccessful at time of closing, a substantial difference from the results for non-minority men.
- About 66 percent of women who had owned and closed construction firms reported the business to be unsuccessful, compared to 58 percent for non-minority men.

Figure F-15.

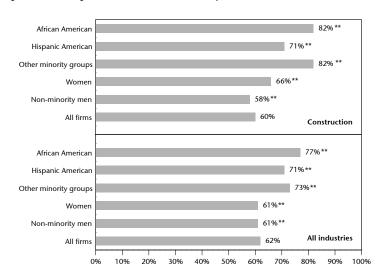
Comparative "failure" rates for firms that closed between 1992 and 1995, construction and all industries in the U.S.

Note:

** Denotes that the difference between the indicated proportion and the corresponding proportion for all firms is significant at the 95% confidence level.

Source

U.S. Census Bureau, 1996 Characteristics of Business Owners Survey (CBO).



Results are similar when comparing successful versus unsuccessful status of closed firms for all sectors combined. Although this analysis is national in scope, these results suggest that higher overall closure rates for minority-owned firms in Oklahoma may indicate higher rates of actual business failure.

Reasons for differences in failure rates. Several researchers have offered explanations for higher rates of successful closure among non-minority-owned firms and higher rates of failure among minority-owned firms:

- Minority business failure is largely due to barriers in access to capital. Regression analysis has identified initial capitalization as the most significant factor in determining firm viability. Because African American-owned businesses secure smaller amounts of debt equity in the form of loans, they are more inclined to fail. Difficulty in accessing capital is found to be particularly acute for minority firms in the construction industry.
- Prior work experience in a family member's business and prior work experience in a similar business are found to be strong determinants of business viability. Because African American business owners are much less likely to have family business experience and/or similar business experience, their firms are less likely to survive.

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⁸ Bates, Timothy and Caren Grown. 1991. "Commercial Lending Practices and the Development of Black-Owned Construction Companies." Center for Economic Studies, U.S. Census Bureau.

⁹ Robb, A. and Fairlie, R. 2005. "Why are Black-Owned Businesses Less Successful than White-Owned Businesses? The Role of Families, Inheritances, and Business Human Capital." University of California, Santa Cruz.

- Level of education is found to be a strong determinant in business survival. Level of education explains a significant portion of the gap in firm closure rates between African Americans and non-minority firms.¹⁰
- Non-minority business owners have the opportunity to pursue a much wider array of business activities, which increases their likelihood of closing successful businesses to pursue more profitable business alternatives. Minority business owners, especially those who do not speak English, have greatly limited employment options and are less likely to close a successful business.¹¹
- The possession of greater initial capital and the generally higher levels of education among Asian Americans determine the high rate of survival of Asian American-owned firms compared to other minority-owned firms.¹²

Summary. Available data suggest that closure rates for African American-, Native American- and Hispanic American-owned firms in Oklahoma are higher than other firms. Based on national results for the construction industry, African American- and Native American-owned construction firms in Oklahoma are likely to have had higher rates of closure than other construction firms.

National data indicate that African Americans who owned and closed construction firms are more likely to have done so because the firm was unsuccessful, compared to all firms. Several studies have examined why business failure rates are higher for African American-owned construction at the national level.

Comparative rates of expansion and contraction. Comparative rates of expansion and contraction of MBE and non-MBE firms are also useful indicators of the relative success of minority-owned businesses. As with rates of business closures, only some of the data available for the nation are also available at the state level.

Expansion. The SBA's 2005 study of minority business dynamics from 1997-2001 also examined rates of expansion and contraction for minority-owned firms in Oklahoma that had paid employees at the starting time period for the analysis ("employer firms").

Figure F-16 compares the percentage of firms that increased their total employment between 1997 and 2001. Slightly less than one-third of all Oklahoma firms expanded according to the SBA study. Expansion rates for minority-owned businesses were similar to — and in some cases greater than — the average for all firms, with rates greatest for Hispanic American-owned firms and least for Native American-owned firms. Although for most groups the pattern in Oklahoma reflects the picture in the nation as a whole, this was not true for African American-owned firms: expansion rates for African American-owned businesses in Oklahoma were higher than average while the percentage of African American-owned firms that expanded nationally was the lowest of all groups examined. However, the

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¹⁰ Ibid. 24.

¹¹ Bates, Timothy. 2002. "Analysis of Young Small Firms That Have Closed: Delineating Successful from Unsuccessful Closures." Center for Economic Studies, U.S. Census Bureau.

¹² Bates, Timothy. 1993. "Determinants of Survival and Profitability Among Asian Immigrant-Owned Small Businesses." Center for Economic Studies, U.S. Census Bureau.

2009 SBA study of business dynamics found that a similar percentage of African American-owned firms expanded during 2002-2003 compared to firms owned by other race and ethnicity groups.¹³

Figure F-16.

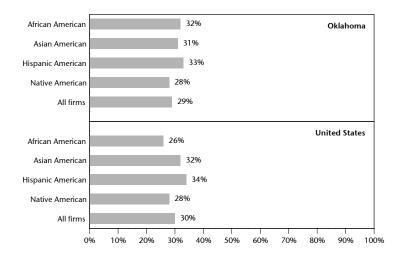
Percentage of firms that expanded employment 1997-2001, Oklahoma and the U.S.

Note:

Data refer only to employer firms. Sample sizes not reported, but statistics are consistent with SBA data quality guidelines.

Source:

Lowrey, Ying. 2005. "Dynamics of Minority-Owned Employer Establishments, 1997-2001." U.S. Small Business Administration Office of Advocacy. Washington, D.C.



The results above are for all firms, not just construction firms. The 2005 SBA study did not separately report expansion rates for construction firms in Oklahoma.

Figure F-17 shows expansion rates for construction firms and firms in all industries in the United States. Nationally, the patterns seen in the construction industry are similar to those seen for all industries. African American-owned construction firms were less likely to have expanded between 1997 and 2001. Native American-owned firms also had below-average expansion rates in both construction and in all industries, although the difference with all firms was smaller. In contrast, a greater share of Hispanic American-owned construction firms expanded during this period compared to all firms. Hispanic American-owned firms in all industries were also more likely to have expanded during this period.

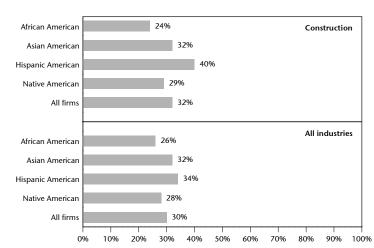
Figure F-17.
Percentage of firms that expanded employment 1997-2001, construction and all industries in the U.S.

Note:

Data refer only to employer firms. Sample sizes not reported, but statistics are consistent with SBA data quality guidelines.

Source:

Lowrey, Ying. 2005. "Dynamics of Minority-Owned Employer Establishments, 1997-2001." U.S. Small Business Administration Office of Advocacy. Washington, D.C.



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¹³ Lowrey, Ying. 2009. "Dynamics of Employer Establishments, 2002-2003." U.S. Small Business Administration Office of Advocacy. Washington D.C.

Contraction. Figure F-18 examines the percentage of firms that reduced their employment between 1997 and 2001. As with the analysis of expanding firms, these data track the activity of firms that had paid employees in 1997. In Oklahoma, minority-owned firms were less likely to have contracted during 1997-2001 than all firms. Among minority groups, African American-owned firms were the least likely to have contracted, followed by Native American-owned firms. Nationally, minority-owned firms were no more likely to have contracted than all firms.

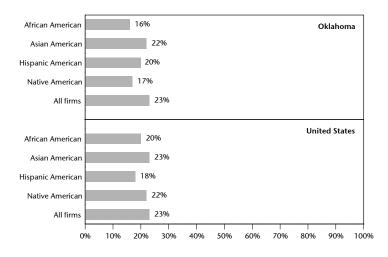
Figure F-18.
Percentage of firms that contracted employment 1997-2001, Oklahoma and the U.S.

Note:

Data refers only to employer firms. Sample sizes not reported, but statistics are consistent with SBA data quality guidelines.

Source

Lowrey, Ying. 2005. "Dynamics of Minority-Owned Employer Establishments, 1997-2001." U.S. Small Business Administration Office of Advocacy. Washington, D.C.



The results in Figure F-18 for Oklahoma are for all industries. As with expansion, the SBA study did not report results for contraction in the Oklahoma construction industry. However, Figure F-19 shows rates of contraction for construction at the national level. Nationally, Asian American- and Hispanic American-owned construction firms had lower rates of contraction than all construction firms in the United States, while African American- and Native American-owned construction firms were no more likely to have contracted than were all construction firms across the nation.

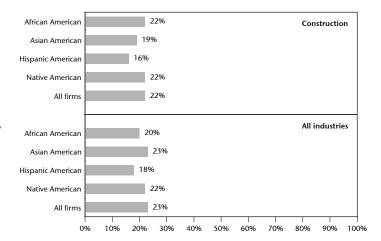
Figure F-19.
Percentage of firms that contracted employment 1997-2001, construction firms and all industries in the U.S.

Note:

Data refers only to employer firms. Sample sizes not reported, but statistics are consistent with SBA data quality guidelines.

Source

Lowrey, Ying. 2005. "Dynamics of Minority-Owned Employer Establishments, 1997-2001." U.S. Small Business Administration Office of Advocacy. Washington, D.C.



Summary. Between 1997 and 2001, the SBA study found that 29 percent of Oklahoma employer firms had expanded employment, 23 percent had contracted employment, and 32 percent had closed. In Oklahoma:

- Among the groups examined, Native American-owned firms were the most likely to close, but were no more likely to expand or contract than all firms.
- African American- and Hispanic American-owned businesses were more likely to close than all firms. However, these firms were less likely to contract and more likely to expand than all firms.
- Asian American-owned firms were no more likely to close or contract than all firms and were close to the average in terms of the percentage that expanded during this period.

In terms of expansion and contraction, minority firms from most groups fared as well or generally better than all firms in Oklahoma. However, with the exception of Asian American-owned businesses, minority-owned firms were more likely to close than all firms in Oklahoma.

Business Earnings/Receipts

Annual receipts and business earnings are also important indicators of the success of businesses. The study team examined:

- Business receipts data published by the U.S. Census Bureau;
- Data on business earnings for business owners from the 2000 Census of Population and the 2008 American Community Survey; and
- Annual revenue data for transportation construction and engineering firms in Oklahoma collected as part of the availability interviews.

Business receipts from 2002 survey of business owners. BBC examined receipts for firms across all industries in Oklahoma and the U.S. using data from the 2002 Survey of Business Owners (SBO), conducted by the U.S. Census Bureau. BBC also analyzed receipts for the construction industry (data for the engineering industry were not available). The SBO separately reports business receipts for employer firms (those with paid employees apart from the business owner and family members) and for all firms. (The SBO data used in this analysis include incorporated and unincorporated firms but not publicly-traded companies or other firms not classifiable by race/ethnicity and gender)

All firms. Figure F-20 presents the mean annual receipts in 2002 for employer and non-employer firms, by race/ethnicity and gender. Figure F-21 presents the mean annual receipts in 2002 for firms with paid employees only.

The SBO data for firms across all industries indicate that the average receipts for minority- and women-owned businesses were lower than the average for all firms, with some minority groups faring worse than others. Disparities in minority- and women-owned business receipts compared to all firms in Oklahoma are generally consistent with those seen at the national level, although average receipts for all firms were lower in Oklahoma.

In Oklahoma, businesses with African American owners had the lowest average receipts. Receipts for African American-owned firms in Oklahoma averaged \$62,000 in 2002, less than 20 percent of the average for all firms. Compared to other minority groups, Hispanic American-owned firms had the highest average receipts in 2002, still less than two-thirds the average for all firms.

Figure F-21 shows mean annual earnings in 2002 for employer firms in Oklahoma and the nation. Minority- and female-owned employer firms also had lower business receipts on average than all employer firms, both in Oklahoma and nationally.

A recent SBA study found similar differences when examining firms in all industries across the U.S.¹⁴

Figure F-20.
Mean annual receipts
(thousands) for all firms, by
race/ethnicity and gender
of owners, 2002

Note:

Includes employer and non-employer firms. Does not include publicly-traded companies or other firms not classifiable by race/ethnicity and gender.

Source

2002 Survey of Business Owners, part of the U.S. Census Bureau's 2002 Economic Census.

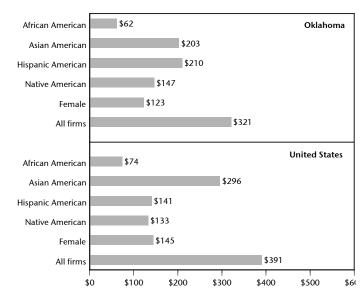


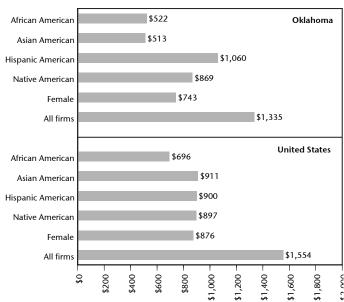
Figure F-21.
Mean annual receipts
(thousands) for all firms
with paid employees, by
race/ethnicity and gender
of owners, 2002

Note:

Includes employer and non-employer firms. Does not include publicly-traded companies or other firms not classifiable by race/ethnicity and gender

Source:

2002 Survey of Business Owners, part of the U.S. Census Bureau's 2002 Economic Census.



¹⁴ Lowrey, Ying. 2007. *Minorities in Business: A Demographic Review of Minority Business Ownership*. Office of Economic Research, Office of Advocacy, U.S. Small Business Administration.

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Construction industry. The study team analyzed SBO data for firms in the construction industry. Receipts for the construction industry are analyzed at the state and national level.

Results for the Oklahoma and U.S. construction industries are presented in Figure F-22 and F-23. Figure F-22 presents the mean annual receipts in 2002 for employer and non-employer firms, by race/ethnicity and gender. Figure F-23 presents the mean annual receipts in 2002 for firms with paid employees only.

Figure F-22.
Mean annual receipts
(thousands) for
construction firms, by
race/ethnicity and
gender of owners, 2002

Note:

Includes employer and non-employer firms. Does not include publicly-traded companies or other firms not classifiable by race/ethnicity and gender.

Source:

2002 Survey of Business Owners, part of the U.S. Census Bureau's 2002 Economic Census.

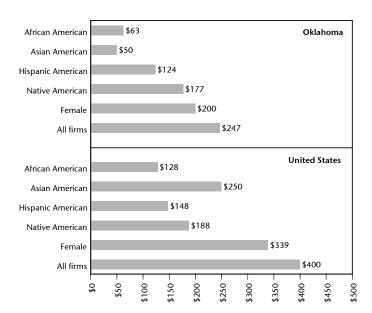


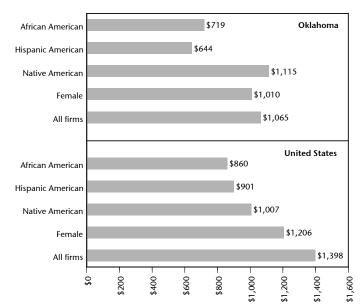
Figure F-23.
Mean annual receipts
(thousands) for
construction firms with
paid employees, by
race/ethnicity and
gender of owners, 2002

Note

Includes employer and non-employer firms. Does not include publicly-traded companies or other firms not classifiable by race/ethnicity and gender.

Source:

2002 Survey of Business Owners, part of the U.S. Census Bureau's 2002 Economic Census.



The SBO data indicate that average 2002 receipts for minority- and women-owned construction firms in Oklahoma were generally lower than the average for all firms. Disparities are most evident when considering all businesses, both employer and non-employer firms. In Oklahoma:

- Average receipts for Asian American-owned construction firms were about 20 percent of the average for all firms;
- African American-owned construction firms' average receipts were about one-quarter the average for all firms;
- Native American-owned firms had the greatest average receipts among minority-owned construction firms, still just 72 percent of the average for all firms; and
- Women-owned construction firms also had lower average receipts than all firms.

When examining only employer firms in Oklahoma, mean receipts for women-owned construction businesses were similar to the average for all firms, and Native American-owned construction firms had greater-than-average receipts. However, mean receipts for African American- and Hispanic American-owned construction businesses were substantially less than the average for all Oklahoma construction firms with paid employees.

Business earnings for business owners. In order to assess the relative business success of self-employed minorities and women in the construction and engineering industries, BBC evaluated earnings using the Public Use Micro-Sample (PUMS) data from the 2000 U.S. Census and the 2008 American Community Survey (ACS). For each sample, BBC examined incorporated and unincorporated business owners age 16 and over who reported positive business earnings. Since the 2000 Census reports earnings for the previous year, figures presented here are for 1999. The ACS is conducted continually throughout the year and reports earnings for one year prior to the date the survey is recorded, thus the figures presented from these data are for a 12-month time period during 2007-2008. Due to small sample sizes, BBC was unable to report robust statistics for engineering business owners using these data sources.

Construction business owners. Figure F-24 shows average earnings in 1999 for construction business owners in Oklahoma and the United States. In Oklahoma, mean annual earnings for non-Hispanic white construction business owners were \$23,500. In contrast, minority business owners averaged earnings of \$19,100. Female construction business owners in Oklahoma also earned substantially less than male construction business owners.

None of the Oklahoma results are statistically significant, possibly due to small sample sizes. However, these results are consistent with the picture at the national level, where statistically significant differences are evident.

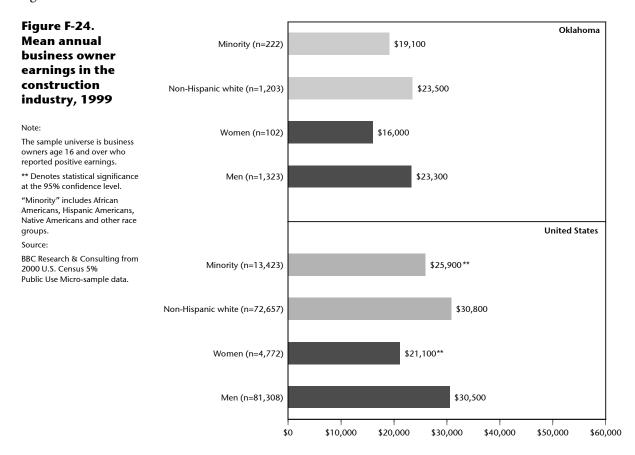
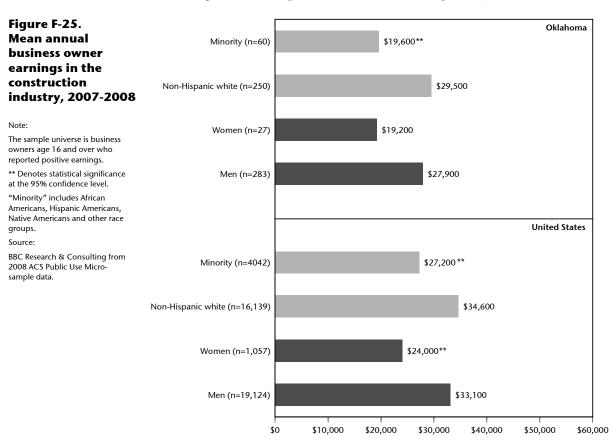
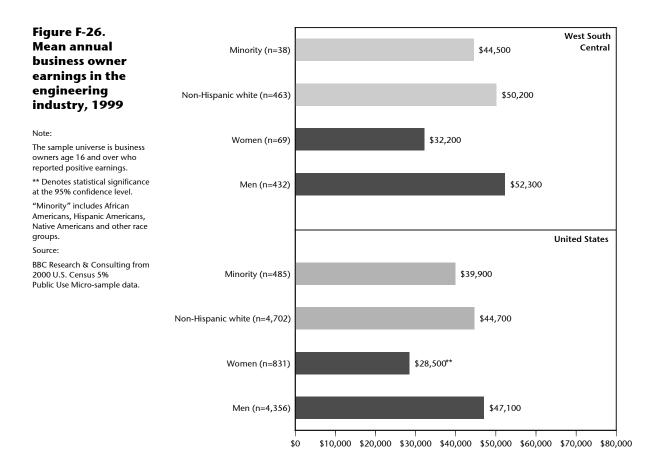


Figure F-25 presents findings based on 2007-2008 earnings. The results are consistent with data for 1999, showing that average earnings for minority and women construction business owners in Oklahoma were less than the average for non-Hispanic whites and males, respectively.



Engineering business owners. Because of small sample sizes for self-employed people in the Oklahoma engineering industry, BBC examined business earnings for self-employed individuals for the West South Central (WSC) region, which includes Oklahoma, Texas, Arkansas and Louisiana. Only data for 1999 could be examined due to small sample sizes for the 2008 ACS data.

Figure F-26 compares results for minorities and non-Hispanic whites and for female and male engineering business owners. Non-Hispanic white engineering business owners in the WSC region had mean annual earnings of approximately \$50,200 in 1999. This compares to about \$44,500 for minority owners during the same year. Female engineering business owners in the WSC region also earned substantially less (\$32,200) compared to male owners (\$52,300).



Regression analysis of business earnings for construction in Oklahoma and WSC. Differences in business owner earnings may be at least partially accounted for by race/ethnicity- and gender-neutral factors such as age, marital status or educational attainment. BBC therefore applied regression analysis to the 2000 PUMS data to examine whether disparities in business earnings for 1999 remained after controlling for certain neutral factors. Consistent with past court-reviewed research, BBC applied an ordinary least squares (OLS) regression to create models for Oklahoma and the West South Central Census Division (referred to in the following discussion as the WSC region). Due to small sample sizes, BBC did not develop a model using 2008 ACS data.

Consistent with model specifications that have been reviewed by the courts, the dependent variable in this model is the natural logarithm of business earnings. Business owners reporting zero or negative business earnings were excluded, as were observations where the Census Bureau had imputed the value of business earnings. Apart from variables indicating the race, ethnicity and gender of the business owner, the model also used available measures from the PUMS data considered likely to affect earnings potential, including age, age-squared, marital status, ability to speak English well, disability condition and educational attainment. This model is very similar to models reviewed by the courts after other recent disparity studies.¹⁵

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¹⁵ For example, National Economic Research Associates, Inc. 2000. *Disadvantaged Business Enterprise Availability Study*. Prepared for the Minnesota Department of Transportation; and National Economic Research Associates, Inc. 2004. *Disadvantaged Business Enterprise Availability Study*. Prepared for the Illinois Department of Transportation.

Figure F-27 shows the results of this OLS model for 1999 earnings. The model indicates that several neutral factors are statistically significant in predicting the 1999 earnings of business owners in the Oklahoma construction industry:

- Older business owners had greater earnings, but this marginal effect declined for the oldest individuals;
- Business owners who were married tended to have greater business earnings;
- Owners who spoke English well, on average, had greater earnings;
- Business owners with less than a high school degree tended to have lower business earnings, compared to business owners with just a high school degree; and
- Business owners with some college (but no degree) tended to have lower earnings, compared to business owners with just a high school degree.

Even when taking into account neutral factors, there are statistically significant disparities in business owner earnings in the Oklahoma construction industry in 1999.

Figure F-27.
Oklahoma construction business owner earnings model, 1999

Variable	Coefficient	t-statistic
Constant	6.913	14.33 **
Age	0.095	5.41 **
Age-squared	-0.001	-5.54 **
Married	0.290	3.31 **
Speaks English well	0.606	1.81 *
Disabled	0.059	0.49
Less than high school	-0.238	-2.18 **
Some college	-0.296	-2.77 **
Four-year degree	-0.116	-0.54
Advanced degree	-0.463	-1.18
African American	-0.190	-0.58
Hispanic American	0.660	3.47 **
Native American	-0.040	-0.34
Other minority group	0.212	0.43
Female	-0.575	-3.43 **

Note:

Source: BBC Research & Consulting based on analysis of 2000 Census Public Use Microdata Sample.

 $[\]ensuremath{^{**}}$ Denotes statistical significance at the 95% confidence level.

 $[\]mbox{\ensuremath{^{\star}}}$ Denotes statistical significance at the 90% confidence level.

The following differences were statistically significant after accounting for neutral factors.

- Hispanic American construction business owners tended, on average, to earn more than similarly situated non-Hispanic white owners; and
- Female construction business owners tended, on average, to earn less than male construction business owners.

The model also indicates that business earnings were lower for African Americans compared to non-Hispanic whites, on average, after taking other factors into account. However, this result is not statistically significant.

The Oklahoma construction industry model includes 927 observations. BBC also developed a model for the wider WSC region, with additional variables to represent business owners in Oklahoma. This model includes 7,137 observations. Figure F-28 shows the results of the construction model for 1999 earnings in the WSC region.

Figure F-28.
WSC region construction business owner earnings model, 1999

Variable	Coefficient	t-statistic
Constant	7.541	40.76 **
Age	0.083	10.43 **
Age-squared	-0.001	-10.99 **
Married	0.314	8.07 **
Speaks English well	0.331	4.04 **
Disabled	-0.078	-1.59
Less than high school	-0.122	-2.77 **
Some college	-0.026	-0.63
Four-year degree	0.165	2.13 **
Advanced degree	0.289	2.09 **
In Oklahoma	-0.226	-4.09 **
African American	-0.350	-3.45 **
African American in Oklahoma	0.167	0.49
Hispanic American	-0.023	-0.49 **
Hispanic American in Oklahoma	0.614	3.35 **
Native American	-0.198	-1.63
Native American in Oklahoma	0.158	0.92
Other minority group	0.117	0.86
Other minority group in Oklahoma	0.113	0.23
Female	-0.361	-4.38 **
Female in Oklahoma	-0.256	-1.35

Note: ** Denotes statistical significance at the 95% confidence level.

 $\mbox{\ensuremath{^{\star}}}$ Denotes statistical significance at the 90% confidence level.

Source: BBC Research & Consulting based on analysis of 2000 ACS Public Use Microdata Sample.

Most of the neutral factors that were statistically significant in the Oklahoma construction model are also statistically significant in this model. However, in the WSC model, business owners with some college but no degree no longer tended to have lower earnings, compared to business owners with just a high school degree.

The following are statistically significant results for the WSC model but not the Oklahoma model:

- Business owners with a four-year or advanced degree had higher earnings on average than those with only a high school education; and
- Business owners in Oklahoma tended to have lower earnings than owners in other states within the WSC region.

After controlling for neutral factors, disparities are still evident at the WSC region level.

- African American and Hispanic American construction business owners in the WSC region earned less on average than non-Hispanic whites; and
- Female construction business owners in the WSC region earned less on average than male owners.

There was also evidence indicating that one group faired differently in Oklahoma. Hispanic American business owners in Oklahoma had significantly higher earnings, on average, than Hispanic American owners elsewhere in the WSC region. Results for African American, Native American and female construction business owners indicate that they did not fair significantly differently in Oklahoma compared to elsewhere in the WSC region.

Regression analysis of business earnings for engineering. To examine the relationship between race/gender and neutral factors in business earnings in the engineering industry, BBC developed a separate model for engineering using 2000 Census data. This model includes engineering business owners in the WSC, with additional variables representing engineering business owners in Oklahoma. The model is based on 387 observations. (Due to small sample sizes BBC did not develop a separate model for just Oklahoma using these data.)

Figure F-28 presents the results of the OLS model of business owner earnings specific to the WSC region engineering industry in 1999.

Figure F-28.
WSC region engineering business owner earnings model, 1999

Variable	Coefficient	t-statistic
Constant	9.879	12.08 **
Age	0.098	3.02 **
Age-squared	-0.001	-3.15 **
Married	0.218	1.18
Speaks English well	-2.018	-9.27 **
Disabled	-0.246	-0.81
Less than high school	0.006	0.02
Some college	-0.442	-1.80 *
Four-year degree	-0.182	-0.74
Advanced degree	-0.106	-0.39
In Oklahoma	0.775	3.91 **
African American	0.200	0.58
Hispanic American	0.346	1.33
Native American	-2.327	-4.53 **
Native American in Oklahoma	-1.785	-3.31 **
Other minority group	0.544	1.34
Female	-0.637	-2.42 **

Note:

Due to small sample sizes, variables representing African Americans, Hispanic Americans, other minorities and females in Oklahoma were dropped from the model.

Source: BBC Research & Consulting, based on analysis of 2000 Census Public Use Microdata Sample.

The engineering-only model of business owner earnings for 1999 shows similar influences from neutral factors as observed in the 1999 WSC construction model. However, there are some differences in statistically significant variables.

- There was no significant difference in earnings between engineering business owners who were married and those who were not;
- Individuals with some college (but no degree) tended to have lower earnings on average than individuals with just a high school education; and
- In contrast to construction business owners, engineering business owners in Oklahoma had higher earnings on average than owners elsewhere in the WSC region.

After controlling for neutral factors, model results indicate statistically significant disparities in earnings at the WSC region level.

- Native American engineering business owners earned less on average than non-Hispanic white engineering business owners in the WSC region; and
- Female engineering business owners earned less on average than male engineering business owners in the WSC region.

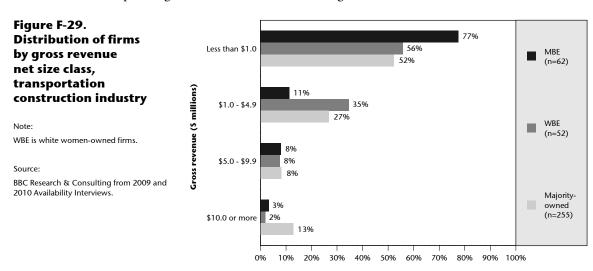
^{**} Denotes statistical significance at the 95% confidence level.

^{*} Denotes statistical significance at the 90% confidence level.

Furthermore, results indicate that Native American engineering business owners earned even less in Oklahoma compared to Native Americans elsewhere in the WSC region.

Gross revenue of transportation construction and engineering firms from availability interviews. Respondents were asked to identify the size range for their gross revenue for the prior year. A second question asked for gross revenue across all Oklahoma locations for multi-location firms.

Construction firms. Figure F-29 examines the distribution of MBEs, WBEs and majority-owned transportation construction industry firms by revenue class. Relatively more MBE/WBEs than majority-owned construction firms in Oklahoma had annual revenue of less than \$1 million. Nearly 80 percent of MBE firms reported gross revenue of less than \$1 million for 2009. Only 52 percent of majority-owned construction firms had revenues of less than \$1 million. A larger share of majority-owned firms also reported gross revenue of \$5 million or greater than MBE/WBEs.



Engineering firms. Transportation engineering industry firms were also asked to identify gross revenue across all Oklahoma locations. As shown in Figure F-30, the distribution of gross revenue for MBE/WBE engineering firms was similar to majority-owned firms that reported revenue of less than \$5 million. No MBE/WBEs reported to have gross revenue of \$10 million or more, while 9 percent of majority-owned firms reported such revenue. Responses of MBEs and WBEs were combined due to the relatively small number of respondents (28 MBEs and 11 WBEs).

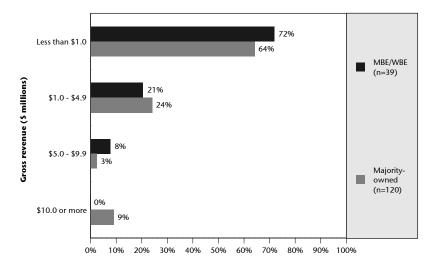


Note:

WBE is white women-owned firms.

Source:

BBC Research & Consulting from 2009 and 2010 Availability Interviews.



Bid capacity. Some recent legal cases regarding race-conscious programs have considered the issue of the "relative capacity" of firms included in the availability analysis. ¹⁶ One approach to controlling for differing relative capacity is to examine relatively small contracts, a technique noted in *Rothe*. In addition to examining small contracts, BBC directly measured bid capacity in the availability analysis.

Measurement of bid capacity. "Bid capacity" for a firm is measured as the largest transportation-related contract or subcontract the firm bid on or performed in Oklahoma within the five years preceding when BBC interviewed the firm. BBC uses bid capacity as one factor in determining whether a firm would be available to bid on specific prime contracts and subcontracts.

Assessment of possible disparities in bid capacity of MBE/WBEs and majority-owned firms. The study team asked firms responding to the availability interviews to identify the largest transportation-related contract the company was awarded in Oklahoma in the past five years. The survey effort produced a database of 542 potentially available firms. The following analysis of bid capacity relies on the results of the availability interviews.

One factor that affects bid capacity is the industry specialization of construction and engineering firms. Some industry segments, such as construction of water, sewer and utility lines, involve larger projects. Other segments, such as landscape architecture and surveying and mapmaking, involve smaller-scale assignments. One way of controlling for variation in bid capacities in different subindustries is to assess whether a firm has a bid capacity above or below the median level for firms in that subindustry. BBC can then test whether minority- and women-owned firms bid on larger or smaller contracts or subcontracts compared with other firms in their subindustries.

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¹⁶ See, for example, the decision of the United States Court of appeals for the Federal Circuit in *Rothe Development Corp. v. U.S. Department of Defense, 545 F.3d 1023 (Fed. Cir. 2008).*

¹⁷ See Appendix D for further description of the survey sample and process.

Figure F-32 indicates the median bid capacity among Oklahoma-based establishments in each of the 15 industry segments within the construction and engineering subindustries. Note that the survey questions regarding the largest project that firms had bid on or been awarded captured data in dollar ranges rather than specific dollar amounts.

Figure F-32.

Median bid capacity by industry segment

Industry segment	Median revenue
Bridge construction and repair	\$5 million
Construction supplies	\$5 million to \$10 million
Consulting and research	Over \$100,000 to \$500,000
Drainage structures and utilities	\$2 million
Electrical, lighting and signals	Over \$500,000 to \$1 million
Engineering services	Over \$500,000 to \$1 million
Excavation, grading and erosion control	Over \$500,000 to \$1 million
Fencing, guardrail and barriers	Over \$100,000 to \$500,000
Highway and tunnel construction	Over \$1 million to \$2 million
Machinery and equipment	Over \$1 million to \$2 million
Other construction services	\$1 million
Other construction supplies	Over \$500,000 to \$1 million
Surveying and mapping services	Over \$100,000 to \$500,000
Traffic control	\$5 million to \$10 million
Trucking and hauling	Over \$500,000 to \$1 million

Source: BBC Research & Consulting from 2009 and 2010 Availability Interviews.

Firms with bid capacities above the median for their industry segments are counted as available for larger transportation projects than most of the firms in their line of business (as well as being counted as available for smaller assignments). Thus, these firms figure more prominently in the availability analysis than firms with smaller bid capacities. An initial question is whether or not minority and women-owned firms are as likely as majority owned firms to have above-median bid capacity for their industry segment. Figure F-33 compares the proportions of firms with above-median bid capacity by ownership.

Figure F-33.

Proportion of firms with above-median bid capacity by ownership

Source

BBC Research & Consulting from 2009 and 2010 Availability Interviews.

	Proportion with above-median bid capacity	
Firm ownership	Construction	Engineering
African American	20.0%	0.0%
Asian-Pacific American	-	100.0%
Subcontinent Asian American	-	100.0%
Hispanic American	20.0%	50.0%
Native American	24.3%	35.7%
Female	28.9%	20.0%
Majority-owned	41.8%	41.2%
All firms	36.7%	39.9%

Construction. The results shown in Figure F-33 indicate that, in aggregate, relatively fewer minority and women-owned construction firms have above-median bid capacity for their subindustries compared with majority-owned firms.

Engineering. Figure F-33 shows that 41 percent of majority-owned firms have an above-median bid capacity and that a relatively smaller share of WBEs is above median bid capacity. The results indicate that 100 percent of Asian-Pacific and Subcontinent Asian American firms reported an above-median bid capacity. However, this is based on a small number of observations: two for Asian-Pacific Americans and one for Subcontinent Asian American.

BBC then considered whether neutral factors account for differences among groups in the probability of having above-median bid capacity and if there are statistically significant disparities in bid capacity after accounting for neutral factors.

There are a number of variables from the availability interviews that may be correlated with bid capacity. Annual revenues, number of employees and, potentially, whether a firm has multiple establishments in Oklahoma are examples. However, the direction of causation for these variables is unclear. Do firms have greater bid capacity because they have more employees, or do they have more employees because they bid on and win larger assignments?

After considering the array of variables from the availability interviews, the study team determined that the age of firms was the neutral factor that might best explain differences in bid capacity (within a subindustry) while being truly exogenous to that capacity. Theoretically, the longer firms are in business, the larger the contracts or subcontracts they might pursue.

To test this hypothesis, the study team conducted separate logistic regression analyses for the construction and engineering industries to determine whether bid capacity could be at least partly explained by the age of the firm and whether or not minority- and women-owned firms differ from majority-owned firms of similar ages (after controlling for subindustry).

Bid capacity results for Oklahoma construction industry. The results for the Oklahoma construction industry are shown in Figure F-34. The results of the logistic regression indicate the following:

- The age of the firm is a significant predictor of having above-median bid capacity;
- Minority-owned firms are significantly less likely to have an above median bid capacity;
 and
- Women-owned firms are only marginally less likely to be above median bid capacity (p-value of 0.052).

Figure F-34.
ODOT-available
construction industry bid
capacity model

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1 4	ote.	

^{*}Significant at 95% confidence level.

Source:

BBC Research & Consulting from 2009 and 2010 Availability Interviews.

Variable	Coefficient	Z-Statistic
Constant Age of firm	-0.63 0.02	-2.68 ** 2.21 *
Minority	-0.78	-2.18 *
Female	-0.63	-1.95

Bid capacity results for Oklahoma engineering industry. The results for the Oklahoma engineering industry are shown in Figure F-35. The logistic regression model for the industry indicates:

- The age of the firm is a significant predictor of having above-average bid capacity for engineering as well as construction;
- MBE/WBE ownership is not a significant predictor of having above-average bid capacity for firms in the engineering industry.

Figure F-37.
ODOT-available
engineering industry bid
capacity model

N	oto	
IN	ote	•

*Significant at 95% confidence level.

Source:

BBC Research & Consulting from 2009 and 2010 Availability Interviews.

Variable	Coefficient	Z-Statistic
Constant	-0.50	-1.80
Age of firm	0.02	2.60 **
Minority	-0.12	-0.26
Female	-0.67	-0.94

^{**}Significant at 99% confidence level.

^{**}Significant at 99% confidence level.

Median revenue. In addition to analyzing median bid capacity, the study team analyzed median revenue of firms available for transportation work. BBC was interested in seeing how MBE/WBE firms compare to majority-owned firms in their rates of being above median revenue for their industry sector. Figure F-38 indicates the median revenue among Oklahoma-based establishments in each of the 15 industry segments within the construction and engineering subindustries.

Figure F-38. Median revenue by industry segment

Industry segment	Median revenue
Bridge construction and repair	\$5 million
Construction supplies	\$5 million to \$10 million
Consulting and research	Over \$100,000 to \$500,000
Drainage structures and utilities	\$2 million
Electrical, lighting and signals	Over \$500,000 to \$1 million
Engineering services	Over \$500,000 to \$1 million
Excavation, grading and erosion control	Over \$500,000 to \$1 million
Fencing, guardrail and barriers	Over \$100,000 to \$500,000
Highway and tunnel construction	Over \$1 million to \$2 million
Machinery and equipment	Over \$1 million to \$2 million
Other construction services	\$1 million
Other construction supplies	Over \$500,000 to \$1 million
Surveying and mapping services	Over \$100,000 to \$500,000
Traffic control	\$5 million to \$10 million
Trucking and hauling	Over \$500,000 to \$1 million

Source: BBC Research & Consulting from 2009 and 2010 Availability Interviews.

As with the study team's analysis of median bid capacity, an initial question is whether or not minority and women-owned firms are as likely as majority owned firms to have above-median revenue for their industry segment. Figure F-39 compares the proportions of firms with above-median bid capacity by ownership.

Figure F-39.
Proportion of firms with above-median revenue by ownership

Source

BBC Research & Consulting from 2009 and 2010 Availability Interviews.

	Proportion with above-median revenue	
Firm ownership	Construction	Engineering
African American	0.0%	0.0%
Asian-Pacific American	-	50.0%
Subcontinent Asian American	-	100.0%
Hispanic American	28.6%	40.0%
Native American	22.4%	29.4%
Female	42.3%	27.3%
Majority-owned	39.6%	39.2%
All firms	36.9%	37.1%

Construction. Figure F-39 shows that, in aggregate, relatively fewer minority and women-owned construction firms have above-median revenue for their subindustries compared with majority-owned.

Engineering. Results are similar to those for median bid capacity. As indicated by Figure F-39, 39 percent of majority-owned firms have an above-median revenue, and a relatively smaller share of WBEs have an above-median revenue. The results indicate that 50 percent of Asian-Pacific and 100 percent of Subcontinent Asian American-owned firms reported above-median revenue. However, this is based on a small number of observations, 2 for Asian-Pacific Americans and 1 for Subcontinent Asian American.

BBC then considered whether neutral factors account for differences among groups in the probability of having above-median revenue and if there are statistically significant disparities in revenue after accounting for neutral factors.

The study team determined that the age of firms was the neutral factor that might best explain differences in revenue (within a subindustry) while being truly exogenous to that capacity. Theoretically, the longer firms are in business, the greater their revenue should be.

To test this hypothesis, the study team conducted separate logistic regression analyses for the construction and engineering industries to determine whether or not revenue could be at least partly explained by the age of the firm and whether or not minority- and women-owned firms differ from majority-owned firms of similar ages (after controlling for subindustry).

Revenue results for the Oklahoma construction industry. The results for the Oklahoma construction industry are shown in Figure F-40. The logistic regression model for the industry indicates:

- Age of the firm is a significant determinant in a firm being above median revenue; and
- MBE ownership is a significant determinant of a firm being above median revenue.

Figure F-40.
Oklahoma construction industry revenue model

Noto:	

*Significant at 95% confidence level.

^{**}Significant at 99% confidence level.

Variable	Coefficient	Z-Statistic
Constant	-0.84	-3.74 **
Age of firm	0.02	2.30 *
Minority	-0.83	-2.44 *
Female	0.15	0.50

Source

BBC Research & Consulting from 2009 and 2010 Availability Interviews.

Revenue results for the Oklahoma engineering industry. The results for the Oklahoma engineering industry are shown in Figure F-41. The logistic regression model for the industry indicates:

- Age of the firm is a significant determinant in a firm being above median revenue; and
- MBE/WBE ownership does not have a significant impact on above median revenue in the engineering subindustry.

Figure F-41.
Oklahoma engineering industry revenue model

Coefficient	Z-Statistic
-1.65	-5.01 **
0.05	4.48 **
-0.15	-0.31
-0.07	-0.10
	-1.65 0.05 -0.15

Note:

*Significant at 95% confidence level.

**Significant at 99% confidence level.

Source:

BBC Research & Consulting from 2009 and 2010 Availability Interviews.

Summary of analysis of business receipts and earnings. BBC examined a number of different data sources for business receipts and earnings for construction and engineering firms.

- Analysis of 2002 data on business receipts show relatively low mean receipts for minority- and women-owned construction firms.
- Regression analyses using Census data for business owner earnings indicate that there
 are statistically significant disparities in earnings in the WSC region for some groups,
 even after taking several neutral factors into account. In construction:
 - African American, Native American and Hispanic American business owners tended to earn less than non-Hispanic white business owners; and
 - **>** Female business owners tended to earn less than male business owners.
- Regression analyses for engineering for the WSC region show that:
 - ➤ Native American business owners earned less on average than non-Hispanic white business owners; and
 - Female business owners earned less on average than male business owners.
- Considering the transportation construction industry overall, relatively few MBE/WBEs had annual revenue of \$1 million or more. Compared with majorityowned firms, relatively few MBE/WBE engineering firms had revenue of \$10 million or more.
- The availability interviews indicate that the share of majority-owned firms that reported gross revenue of \$10 million or more for 2009 was substantially greater than the share of MBE/WBEs for both construction and engineering firms. No MBE/WBE engineering firms reported revenue of \$10 million of more for 2009.

APPENDIX G. Access to Capital for Business Formation and Success

Access to capital represents one of the factors researchers have examined when studying business formation and success. If discrimination exists in capital markets, minorities and women may have difficulty acquiring the capital necessary to start or expand a business.¹

Other appendices examine topics related to the formation and success of businesses. For example, Appendix E investigates several other factors that may lead to differences in business ownership, and Appendix F explores marketplace dynamics that may explain differences in success of businesses. This appendix explores access to business capital, which relates closely to matters discussed elsewhere — namely, formation and development of businesses.

BBC begins by studying homeownership and mortgage lending, as home equity is an important source of capital to start and expand businesses. We then examine access to business loans to assess whether minorities and females experience difficulty in acquiring capital.

Homeownership and Mortgage Lending

BBC analyzed homeownership and the mortgage lending industry to explore differences across race, ethnicity and gender groups that may lead to disparities in access to capital.

Homeownership. Wealth created through homeownership can be an important source of funds to start or expand a business.² Any barriers to homeownership and home equity growth for minorities or women can affect business opportunities by constraining acquisition of capital. Similarly, any barriers to accessing equity through home mortgages can limit the availability of funds for new or expanding businesses. In sum:

- A home is a tangible asset that provides borrowing power to the owner;
- Wealth that accrues from housing equity and tax savings from homeownership contributes to capital formation;³
- Mortgage loans have traditionally been the second largest loan type for small businesses next to lines of credit;⁴ and

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¹ For an example, see: Coleman, Susan. 2002. Small Firm Sources of Debt Capital: A Comparison by Gender, Race and Ethnicity. University of Hartford.

² The recent (beginning in late 2006) housing and mortgage crisis has substantially affected the ability of small businesses to secure loans through home equity. A discussion of the consequences to small businesses and MBE/WBEs is provided at the end of this section.

³ Jackman, Mary R. and Robert W. Jackman 1980. "Racial Inequalities in Home Ownership." *Social Forces.* 58. 1221-1234.

⁴ Berger, Allen N. and Gregory F. Udell. 1998. "The Economics of Small Business Finance: The Roles of Private Equity and Debt Markets in the Financial Growth Cycle." *Journal of Banking and Finance*. 22.

Homeownership is associated with an estimated 30 percent reduction in probability of loan denial for small businesses.⁵

The study team first considered homeownership rates and home prices in Oklahoma and the United States before turning to data on the home mortgage market.

Homeownership rates. Homeownership is the first step toward building home equity to use for other purposes. Many studies document past discrimination in the U.S. housing market. For example, the United States has a history of restrictive real estate covenants and property laws affecting the ownership rights of minorities and women. In the past, a woman's involvement in homeownership was ancillary to that of her husband and parents. BBC used 2000 Census and 2008 American Community Survey (ACS) data to examine homeownership rates.

Figure G-1 shows rates of homeownership for minority groups and non-Hispanic whites in Oklahoma and the nation in 2000 and 2008. About 44 percent of African American households and 46 percent of Hispanic American households in Oklahoma were homeowners in 2000, compared with about 72 percent of non-Hispanic whites.

Homeownership rates in Oklahoma were also lower for Native Americans (66%) and other minorities (49%) compared to non-Hispanic whites.

Statistically significant disparities in homeownership rates are also present in 2008, as non-Hispanic whites had higher rates of home ownership compared to all other race/ethnicity groups examined. Patterns of homeownership in Oklahoma were similar to those seen in the United States in both 2000 and 2008. Homeownership rates for African Americans, Hispanic Americans and non-Hispanic whites in Oklahoma were close to overall rates at the national level, but Native Americans were more likely to be homeowners in Oklahoma than in the United States in both years.

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⁵ Cavalluzzo, Ken and John Wolken. 2005. "Small Business Loan Turndowns, Personal Wealth and Discrimination." *Journal of Business*. 78:2153-2178.

⁶ Ladd, Helen F. 1982. "Equal Credit Opportunity: Women and Mortgage Credit." *The American Economic Review*. 72:166-170.

Card, Emily. 1980. "Women, Housing Access, and Mortgage Credit." Signs. 5:215-219.

Figure G-1. Homeownership rates, 2000 and 2008

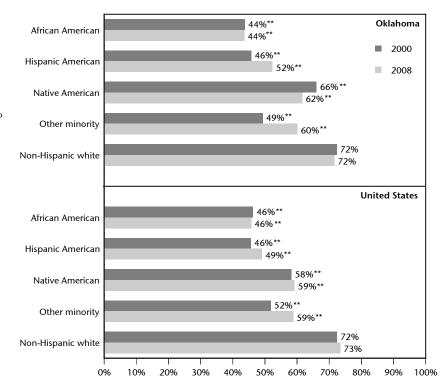
Note:

The sample universe is all households.

** Denotes that the difference in proportion between the minority group and non-Hispanic whites is statistically significant at the 95% confidence level.

Source:

BBC Research & Consulting from 2000 U.S. Census and 2008 American Community Survey data.



Although not shown here, BBC also examined homeownership rates for heads of household working in the Oklahoma construction industry: the rate of homeownership in 2000 was lower for African Americans, Hispanic Americans and Native Americans compared to non-Hispanic whites.

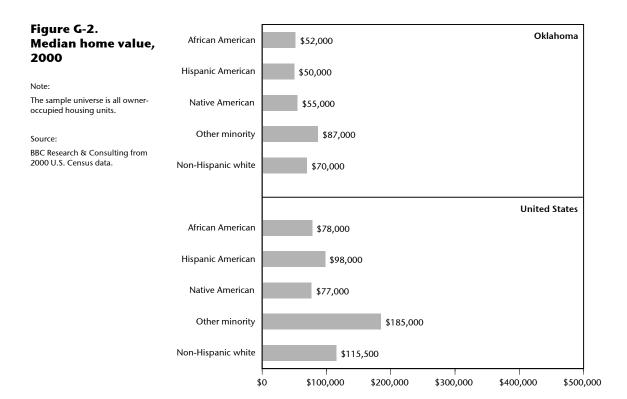
Differing rates of homeownership in part reflect lower incomes for minorities. This may be self-reinforcing, as low wealth puts individuals at a disadvantage in becoming homeowners, which has historically been an effective path to building wealth. One study found statistically significant results indicating that the probability of homeownership is considerably lower for African Americans than it is for comparable non-Hispanic whites throughout the U.S.⁸

Home values. Recent research has found that homeownership and the value of the home is a direct determinant of capital available to form or expand businesses. For example, using microdata from matched Current Population Surveys (1993-2004), one study found that differences in housing appreciation between metropolitan areas affected opportunities for self-employment. The study indicated that a 10 percent annual increase in housing equity increases the mean probability of entrepreneurship by approximately 20 percent.

Using U.S. Bureau of the Census data on home values in 2000 and 2008, BBC compared median home values for different race and ethnic groups. Figure G-2 presents 2000 median home values in Oklahoma and the United States.

⁸ Jackman. 1980. "Racial Inequalities in Home Ownership."

⁹ Fairlie, Robert W. and Harry A. Krashinky. 2006. "Liquidity Constraints, Household Wealth, and Entrepreneurship Revisited." *IZA Discussion Paper*. No. 2201.



The median home value in 2000 for non-Hispanic whites living in Oklahoma was \$70,000, substantially above the median value of homes owned by African Americans, Hispanic Americans and Native Americans. In contrast, the median home value for other minorities was \$87,000, more than that for non-Hispanic whites. Although home values were lower on average in Oklahoma than in the U.S., the pattern in Oklahoma for different race/ethnicity groups is similar to that seen at the national level.

Figure G-3 presents median home values by race/ethnicity in Oklahoma and the U.S. based on 2008 ACS data. As in 2000, African Americans, Hispanic Americans and Native Americans had substantially lower median home values compared to non-Hispanic whites in Oklahoma, whereas the median home value for other minorities was higher.

In the United States, median home values for African Americans and Native Americans remained well below the median value for non-Hispanic whites in 2008, while the national median home value for Hispanic Americans surpassed that of non-Hispanic whites.

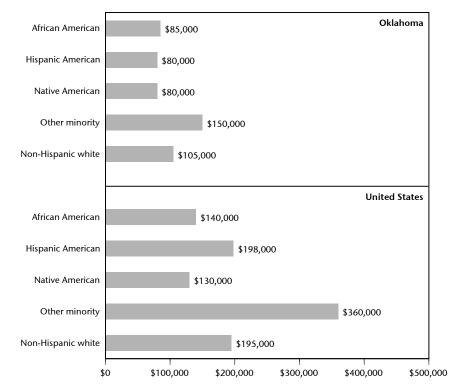
Figure G-3. Median home value, 2008

Note:

The sample universe is all owner-occupied housing units.

Source

BBC Research & Consulting from 2008 American Community Survey data.



Mortgage lending. If discriminated against when applying for home mortgages, minorities may be denied opportunities to own homes, purchase more expensive homes or access equity in their homes. To examine this possibility, BBC explored the mortgage lending market in the United States and Oklahoma.

The best available source of information concerning mortgage lending comes from Home Mortgage Disclosure Act (HMDA) data, which provide information on mortgage loan applications received by financial institutions, savings banks, credit unions and some mortgage companies. ¹⁰ These data include information about the location, dollar amount, and types of loans made, as well as race and ethnicity, income, and credit characteristics of loan applicants. The data are available for home purchase, home improvement and refinance loans.

BBC examined HMDA data provided by the Federal Financial Institutions Examination Council (FFIEC) on conventional loan denial rates for high-income borrowers. Conventional loans are those that are not insured by a government program; high-income borrowers include households with income at or above 120 percent of the U.S. Department of Housing and Urban Development (HUD) area median family income. ¹¹ Loan denial rates are based on denied loans as a share of all mortgage applications where the application process was not terminated by the potential borrower.

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Financial institutions are required to report HMDA data if they have assets of more than \$32 million, have a branch office in a metropolitan area, and originated at least one home purchase or refinance loan in the reporting calendar year. Mortgage companies are required to report HMDA if they are for-profit institutions, had home purchase loan originations exceeding 10 percent of all loan obligations in the past year, are located in an Metropolitan Statistical Area (or originated five or more home purchase loans in an MSA) and either had more than \$10 million in assets or made at least 100 home purchase or refinance loans in the calendar year.

There are four HUD areas in Oklahoma, with 2008 median household incomes ranging from \$45,700 to \$55,300.

Data on loan denial rates for mortgages in Oklahoma show higher denial rates for minority high-income households than for non-Hispanic white high-income households. ¹² Figure G-4 reports loan denial rates for Oklahoma and for the nation in 2004, 2006 and 2008. Among high-income households applying for mortgages, between 29 percent and 33 percent of African American applicants in Oklahoma had their applications denied during the years examined, compared with at most 19 percent of non-Hispanic white households. Loan denial rates were also higher for Native Americans and Hispanic Americans compared to non-Hispanic whites, while loan denial rates for Asian Americans were lower.

Loan denial rates for high-income borrowers were typically higher in Oklahoma compared to the U.S. in 2004 and lower in 2006 and 2008. However, the pattern for African Americans, Hispanic Americans and Native Americans in Oklahoma mirrored the pattern seen nationally, with higher loan denial rates for these groups compared to non-Hispanic whites.

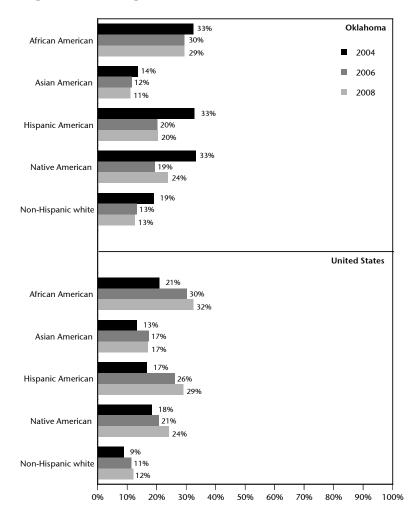
Figure G-4.
Denial rates on conventional purchase loans to high-income households in 2004, 2006 and 2008

Note:

High-income borrowers are those households with 120% or more than the HUD area median family income (MFI).

Source:

FFIEC HMDA data 2004, 2006 and 2008



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¹² Rates are based on all loans originated during the year and not on a sample; thus, analyses using HMDA data do not require tests for statistical significance.

A number of national studies have examined disparities in loan denial rates and loan amounts for minorities in the presence of other influences. Examples include the following:

- A study by the Federal Reserve Bank of Boston is one of the most cited studies of mortgage lending discrimination.¹³ It was conducted using the most comprehensive set of credit characteristics ever assembled for a study on mortgage discrimination.¹⁴ The study provided persuasive evidence that lenders in the Boston area discriminated against minorities in 1990.¹⁵
- Using the Federal Reserve Board's 1983 Survey of Consumer Finances and the 1980 Census of Population and Housing data, statistical analysis revealed that minority households were onethird as likely to receive conventional loans as non-Hispanic white households after taking into account financial and demographic controls.
- Findings from a Midwest study indicate a significant relationship between race and both the number and size of mortgage loans. Data matched on socioeconomic characteristics revealed that African American borrowers across 13 census tracts received significantly fewer and smaller loans compared to their white counterparts.¹⁷

However, other studies have found that differences in preferences for Federal Housing Administration (FHA) loans — mortgage loans that are insured by the federal government — versus conventional loans among racial and ethnic groups may partly explain disparities found in conventional loan approvals between minorities and non-minorities in past years. ¹⁸ Several studies have found that, historically, minority borrowers were far more likely to receive FHA loans than comparable non-Hispanic white borrowers at all income and wealth levels. The insurance on FHA loans protects the lender, but the borrower can be impacted by higher-cost loans. ¹⁹

Higher fees and interest rates. Loan denial represents one of several ways minorities might be discriminated against in the home mortgage market; mortgage-lending discrimination could also occur through higher fees and interest rates. The housing market provides a unique environment for this type of discrimination through fees associated with various loan types.

Until recently, one of the fastest-growing segments of the home mortgage industry was subprime lending. From 1994 through 2003, subprime mortgage activity grew by 25 percent per year and accounted for \$330 billion of U.S. mortgages in 2003, up from \$35 billion a decade earlier.

¹³ Munnell, Alicia H., Geoffrey Tootell, Lynn Browne and James McEneaney. 1996. "Mortgage Lending in Boston: Interpreting HMDA Data." The American Economic Review. 86: 25-53.

¹⁴Ladd, Helen F. 1998. "Evidence on Discrimination in Mortgage Lending." The Journal of Economic Perspectives. 12:41-62.

¹⁵ Yinger, John. 1995. Closed Doors, Opportunities Lost: The Continuing Costs of Housing Discrimination. New York: Russell Sage Foundation, 71.

¹⁶ Canner, Glenn B., Stuart A. Gabriel and J. Michael Woolley. 1991. "Race, Default Risk and Mortgage Lending: A Study of the FHA and Conventional Loan Markets." Southern Economic Journal. 58:249-262.

¹⁷ Leahy, Peter J. 1985. "Are Racial Factors Important for the Allocation of Mortgage Money?: A Quasi-Experimental Approach to an Aspect of Discrimination." American Journal of Economics and Sociology. 44:185-196.

¹⁸Canner. 1991. "Race, Default Risk and Mortgage Lending: A Study of the FHA and Conventional Loan Markets."

¹⁹ Yinger. 1995. Closed Doors, Opportunities Lost: The Continuing Costs of Housing Discrimination. 80.

Subprime loans generally have higher interest rates than prime loans. These loans are marketed and sold to customers with blemished or limited credit histories who would typically not qualify for prime loans. Over time, these loans also became available to homeowners who did not want to make a down payment, disclose or provide proof of income and assets, or wanted to purchase a "high-priced" home and would not be able to qualify under a different instrument. Decause of higher interest rates and additional costs, subprime loans affect homeowners' ability to grow home equity while simultaneously increasing their risks of foreclosure — consequences that have become especially apparent since 2007 and are discussed in greater detail below.

Although there is no standard definition of a subprime loan, there are several commonly-used approaches to examining rates of subprime lending. BBC used a "rate-spread method"— in which subprime loans are identified as those with substantially above-average interest rates — to examine subprime lending in 2004, 2006 and 2008. These results are presented in Figures G-5 and G-6. BBC also examined subprime lending rates in 2004 using the U.S. Department of Housing and Urban Development (HUD) Subprime Lender list. Rather than identifying subprime loans based on the interest rate, this approach identifies loans that have been issued by subprime lenders. HUD uses a number of variables in HMDA data to identify such lenders. For example, subprime lenders will usually have relatively lower origination rates; they will have higher proportions of home refinance loans; and they typically do not sell a significant percentage of portfolios to government-sponsored enterprises. After compiling a list of "potential" subprime lenders, HUD called or visited the website of each lender to determine if they specialized in subprime loans.

As an updated HUD list was not available after 2005, this analysis was conducted for 2004 but not 2006 or 2008. Results of this analysis are presented in Figure G-7. In both cases, the study team considered home purchase loans and refinance loans separately.

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²⁰ Gerardi, Shapiro, and P. Willen. 2008. "Subprime Outcomes: Risky Mortgages, Homeownership Experiences, and Foreclosure. *Federal Reserve Bank of Boston*.

²¹ Consistent with other researchers, first lien loans are identified as subprime if they have an interest rate more than 3 percentage points higher than the federal treasury rate of like maturity. For junior lien loans, the required rate difference is 5 percentage points.

²² For more information on this methodology, visit the website for the Department of Housing and Urban Development at http://www.huduser.org/.

Figure G-5 shows the percent of conventional home purchase loans that were subprime in 2004, 2006 and 2008 in Oklahoma and the United States. In Oklahoma during each of the years examined, African American, Native American and Hispanic American borrowers were more likely to have a subprime loan than non-Hispanic whites. For example, in 2008 — the most recent year available — about 26 percent of African Americans, 22 percent of Hispanic Americans and 33 percent of Native Americans who took out a home purchase loan in Oklahoma had subprime loans, compared to 19 percent of non-Hispanic whites. In contrast, only 10 percent of home purchase loans issued to Asian American borrowers in Oklahoma in 2008 were subprime.

Figure G-5.
Percent of conventional home purchase loans that were subprime: 2004, 2006 and 2008

Note: Subprime loans are identified using rate spreads.

Source: FFIEC HMDA data 2004, 2006 and 2008.

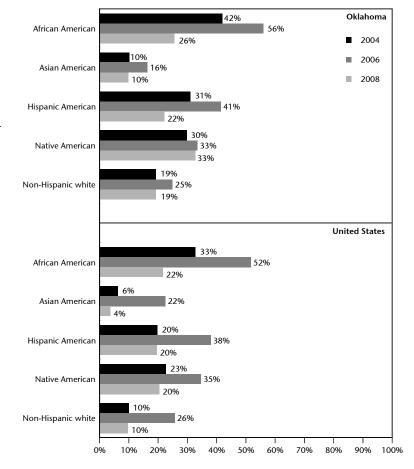


Figure G-6 examines refinancing loans. African American, Hispanic American and Native American borrowers in Oklahoma were more likely than non-Hispanic whites to refinance with a subprime loan in each of the years examined, whereas Asian American borrowers were less likely. This pattern was also evident at the national level.

Figure G-6.
Percent of conventional refinancing loans that were subprime: 2004, 2006 and 2008

Note: Subprime loans are identified using rate spreads.

Source: FFIEC HMDA data 2004, 2006 and 2008.

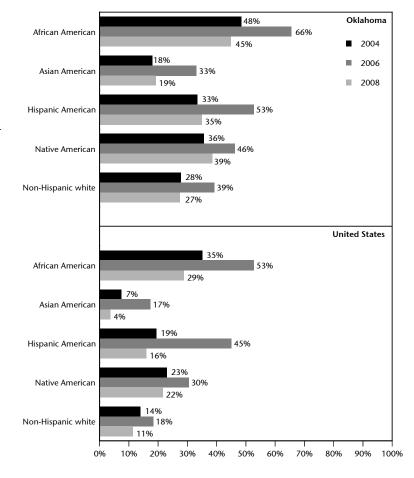


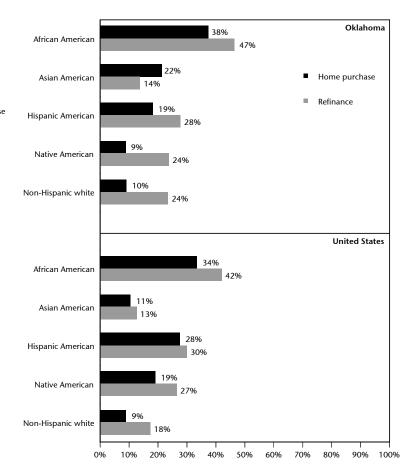
Figure G-7 shows the percent of loans issued by subprime lenders (as identified by the HUD list) for Oklahoma and the U.S. in 2004. Based on this approach, African American, Asian American and Hispanic American borrowers in Oklahoma were more likely to obtain home purchase loans from subprime lenders compared to non-Hispanic whites. Native Americans were about as likely as non-Hispanic whites to finance a home purchase using such loans.

When considering refinance loans in Oklahoma, Native Americans were issued loans from subprime lenders at the same rate as non-Hispanic whites. For African Americans, however, the percentage of refinancing loans that were from these HUD-identified lenders was nearly double that for non-Hispanic whites. Hispanic Americans also had a higher rate of refinancing with subprime loans, while for Asian Americans the rate was lower.

Figure G-7.
Percent of conventional home purchase and refinancing loans from subprime lenders, 2004

Note: Subprime loans are identified as those loans issued by lenders on the 2004 HUD Subprime Lender list.

Source: FFIEC HMDA data 2004 and 2004 HUD Subprime Lender list.



In sum, BBC's analysis of HMDA data on subprime lending reveals the following:

- Compared to non-Hispanic whites, a greater share of loans made to Hispanic Americans and African Americans were subprime in both Oklahoma and the U.S. This is true for both home purchase and refinancing loans, and it applied when identifying subprime loans using the rate-spread method in 2004, 2006 and 2008 or when using the HUD Subprime Lender list in 2004.
- In Oklahoma, Native Americans were more likely to have subprime loans compared to non-Hispanic whites based on the rate spread method.
- Asian Americans in Oklahoma were more likely to obtain home purchase loans from subprime lenders in 2004.

There is evidence of lenders seeking out and offering these loans to individuals who likely will not be able to pay off the loan, a form of "predatory lending." ²³ Furthermore, some research has found that many recipients of subprime loans could have qualified for prime loans. ²⁴

Research has found evidence that predatory lenders have disproportionately targeted minorities. A 2001 HUD study using 1998 HMDA data found that subprime loans were disproportionately concentrated in black neighborhoods compared to white neighborhoods even after controlling for income. For example, borrowers in upper-income black neighborhoods were six times more likely to refinance with a subprime loan than borrowers in upper-income white neighborhoods.

Historically, differences in types of loans awarded to minorities have also been attributed to steering by real estate agents, who serve as an information filter between buyers and sellers. Some studies claim that real estate brokers provide different levels of assistance and different information on loans to minorities and non-minorities. This "steering" can shape the perception of minority borrowers with respect to the availability of loans.

Lessons from the recent mortgage lending crisis. The turmoil in the housing market since late 2006 has been far-reaching, resulting in the loss of home equity, decreased demand for housing and increased rates of foreclosure. ²⁸ Much of the blame has been placed on risky practices in the mortgage industry including substantial increases in subprime lending.

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Department of Housing and Urban Development (HUD) and the Department of Treasury. 2001. HUD-Treasury National Predatory Lending Task Force Report. *HUD*; Carr, J. and L. Kolluri. 2001. Predatory Lending: An Overview. *Fannie Mae Foundation*; and California Reinvestment Coalition, Community Reinvestment Association of North Carolina, Empire Justice Center, Massachusetts Affordable Housing Alliance, Neighborhood Economic Development Advocacy Project, Ohio Fair Lending Coalition and Woodstock Institute, 2008. "Paying More for the American Dream."

²⁴ Freddie Mac. 1996, September. "Automated Underwriting: Making Mortgage Lending Simpler and Fairer for America's Families." *Freddie Mac.* (accessed February 5, 2007); and Lanzerotti. 2006. "Homeownership at High Cost: Foreclosure Risk and High Cost Loans in California." *Federal Reserve Bank of San Francisco*.

²⁵ Department of Housing and Urban Development (HUD) and the Department of Treasury. 2001.

²⁶ Kantor, Amy C. and John D. Nystuen. 1982. "De Facto Redlining a Geographic View." *Economic Geography*. 4:309-328.

²⁷ Yinger. 1995. Closed Doors, Opportunities Lost: The Continuing Costs of Housing Discrimination. 78–79.

²⁸ Joint Center for Housing Studies of Harvard University. 2008. "The State of the Nation's Housing."

As discussed above, subprime mortgages increased at an extraordinary rate between the mid-1990s and mid-2000s. These high-cost loans increased from 8 percent of originations in 2003 to 20 percent in both 2005 and 2006. In 2005, subprime loans represented roughly one-fifth of all loans originated in Oklahoma. The preponderance of subprime lending is important as households repaying subprime loans have a higher likelihood of delinquency or foreclosure. A 2008 study released from the Federal Reserve Bank of Boston found, "homeownerships that begin with a subprime purchase mortgage end up in foreclosure almost 20 percent of the time, or more than 6 times as often as experiences that begin with prime purchase mortgages." ³¹

While Oklahoma has not suffered to the same extent as states such as California and Nevada in terms of foreclosures and falling home values, the state has nevertheless been affected by the change in housing market conditions. In Oklahoma, there were roughly 13,000 properties with foreclosure filings in 2009, representing one in every 125 housing units.³² Oklahoma's foreclosure rate ranked 34th out of 50 states and Washington D.C. in 2009. As of September 2009, the proportion of residential properties in Oklahoma with negative equity (a mortgage worth more than the value of the home) was 6.1 percent, considerably below the national average of 22.6 percent.³³ However, due to higher rates of subprime mortgages, it is likely that minority homeowners have been disproportionately affected in terms of foreclosures and loss of home equity.

These problems facing the housing industry substantially reduce the ability of would-be borrowers to secure capital through home mortgages for starting or expanding small businesses. This issue was highlighted in statements made by members of the Board of Governors of the Federal Reserve System to the U.S. Senate and U.S. House of Representatives in 2008:

- On April 16, 2008, Frederic Mishkin informed the U.S. Senate Committee on Small Business and Entrepreneurship that "one of the most important concerns about the future prospects for small business access to credit is that many small businesses use real estate assets to secure their loans. Looking forward, continuing declines in the value of their real estate assets clearly have the potential to substantially affect the ability of those small businesses to borrow. Indeed, anecdotal stories to this effect have already appeared in the press." 34
- On November 20, 2008, Randall Kroszner told the U.S. House of Representatives Committee on Small Business that "small business and household finances are, in practice, very closely intertwined. [T]he most recent Survey of Small Business Finances (SSBF) indicated that about 15 percent of the total value of small business loans in 2003 was collateralized by 'personal' real estate. Because the condition of household balance sheets can be relevant to the ability of some small businesses to obtain credit, the fact that declining house prices have weakened household balance-sheet positions suggests that the housing market crisis has likely had an adverse impact

²⁹ Joint Center for Housing Studies of Harvard University. 2008. "The State of the Nation's Housing."

³⁰ Mayer, Chris and Karen Perce. "Subprime Mortgage: Who, Where and to Whom?" *Division of Research and Statistics and Monetary Affairs*. Available online at: "http://www.federalreserve.gov/Pubs/FEDS/2008/200829/200829abs.html."

³¹ Gerardi, Shapiro, and P. Willen. 2008. "Subprime Outcomes: Risky Mortgages, Homeownership Experiences, and Foreclosure. *Federal Reserve Bank of Boston*.

³²RealtyTrac. 2009 U.S. Foreclosure Market Report.TM Available online at http://www.realtytrac.com.

³³ First American CoreLogic. 2009. First American CoreLogic's Negative Equity Data Report.

³⁴ Mishkin, Frederic. 2008. "Statement of Frederic S. Mishkin, Member, Board of Governors of the Federal Reserve System before the Committee on Small Business and Entrepreneurship, U.S. Senate on April 16."

on the volume and price of credit that small businesses are able to raise over and above the effects of the broader credit market turmoil." ³⁵

Federal Reserve Chairman Ben Bernanke recognized the reality of these concerns in a speech titled "Restoring the Flow of Credit to Small Businesses" on July 12, 2010.³⁶ Bernanke indicated that small businesses have had difficulty accessing credit and pointed to the declining value of real estate as one of the primary obstacles.

Furthermore, the National Federation of Independent Business (NFIB) conducted a national survey of 751 small businesses³⁷ in late-2009 to investigate how the recent recession has impacted access to capital.³⁸ NFIB concluded that "falling real estate values (residential and commercial) severely limit small business owner capacity to borrow and strains currently outstanding credit relationships." Survey results indicated that 95 percent of small business employers owned real estate and 13 percent held upside-down property.³⁹

Current opportunities to obtain business capital through home mortgages appear to be limited, especially for homeowners with little home equity. Furthermore, the increasing rates of default and foreclosure, particularly for homeowners with subprime loans, reflect shrinking capital that was initially available through these loans. These consequences are likely to have a disproportionate impact on minorities in terms of both homeownership and their ability to secure capital for business start-up and growth.

Redlining. Redlining refers to mortgage lending discrimination against geographic areas associated with high lender risk. These areas are often racially determined, focused in African American or mixed race neighborhoods. ⁴⁰ This practice can perpetuate problems in already poor neighborhoods.

Most quantitative studies have failed to find strong evidence in support of geographic dimensions of lender decisions. Studies in Columbus, Ohio; Boston, Massachusetts; and Houston, Texas found that racial differences in loan denial had little to do with the racial composition of a neighborhood, but rather the individual characteristics of the borrower. Some studies found the race of an applicant but not the racial makeup of the neighborhood to be a factor in loan denials.

³⁵ Kroszner, Randall. 2008. "Effects of the financial crisis on small business." *Testimony before the Committee on Small Business, U.S. House of Representative on November 20.*

³⁶ Bernanke, Ben. 2010. Restoring the Flow of Credit to Small Businesses. Presented at the Federal Reserve Meeting Series: Addressing the Financing Needs of Small Businesses on July 12.

³⁷ The study defined a small business as a business employing no less than one individual in addition to the owner(s) and no more than 250.

³⁸ National Federation of Independent Business (NFIB). 2010. Small Business Credit in a Deep Recession.

³⁹ Upside-down is defined as a mortgage that is worth more than the appraised value of the house.

⁴⁰ Holloway, Steven R. 1998. "Exploring the Neighborhood Contingency of Race Discrimination in Mortgage Lending in Columbus, Ohio." *Annals of the Association of American Geographers*. 88:252-276.

⁴¹ Ladd, Helen F. 1998. "Evidence on Discrimination in Mortgage Lending." *The Journal of Economic Perspectives*. 12:41-62.

⁴² See Holloway. 1998. "Exploring the Neighborhood Contingency of Race Discrimination in Mortgage Lending in Columbus, Ohio."; Tootell. 1996. "Redlining in Boston: Do Mortgage Lenders Discriminate Against Neighborhoods?"; and Holmes, Andrew and Paul Horvitz. 1994. "Mortgage Redlining: Race, Risk, and Demand." *The Journal of Finance*. 49:81-99.

Studies of redlining have primarily focused on the geographic aspect of lender decisions; however, redlining can also include the practice of restricting credit flows to minority neighborhoods through procedures that are not observable in actual loan decisions. Examples include branch placement, advertising and other pre-application procedures, all of which can prevent minorities from starting businesses. ⁴³ Locations of financial institutions are important as local banking sectors often finance local business. ⁴⁴ Redlining practices would limit this capital resource to minorities.

Steering by real estate agents. A number of researchers have found that discrimination by real estate agents sometimes contributes to residential segregation of minorities. Such practices include "steering" of prospective homebuyers toward particular neighborhoods based on their race or ethnicity (a practice that has been prohibited by law for many decades). A recent study found such practices in cities throughout the country. ⁴⁵

Gender discrimination in mortgage lending. Relatively little information is available on sex-based discrimination in mortgage lending markets. Historically, lending practices overtly discriminated against women by requiring information on marital and childbearing status. Risk associated with women of childbearing age and unmarried women resulted in "income discounting," limiting the availability of loans to women. 46

The Equal Credit Opportunity Act (ECOA) of 1973 suspended these discriminatory lending practices, but certain barriers have continued in spite of such laws. For example, there is some evidence that lenders have under-appraised property for female borrowers, thereby restricting the amount of capital they received.⁴⁷

Access to Business Capital

Barriers to capital markets can have significant impacts on small business formation and expansion. Several studies have found evidence that start-up capital is important for business profits, longevity and other outcomes:⁴⁸

The amount of start-up capital is positively associated with small business sales and other outcomes;⁴⁹

⁴³ Yinger, John. 1995. "Closed Doors, Opportunities Lost: The Continuing Costs of Housing Discrimination." Russell Sage Foundation. New York. 78-79.

⁴⁴ Holloway. 1998. "Exploring the Neighborhood Contingency of Race Discrimination in Mortgage Lending in Columbus, Ohio."

⁴⁵ Galster, George and Erin Godfrey. 2005. "Racial Steering by Real Estate Agents in the U.S. in 2000." *Journal of the American Planning Association*. 71:251-268.

⁴⁶ Card. 1980. "Women, Housing Access, and Mortgage Credit."

⁴⁷ Ladd, Helen F. 1982. "Equal Credit Opportunity: Women and Mortgage Credit." *The American Economic Review*. 72:166-170.

⁴⁸ For examples see Fairlie. 2006. "Liquidity Constraints, Household Wealth, and Entrepreneurship Revisited;" and Grown, Caren and Timothy Bates. 1991. "Commercial Bank Lending Practices and the Development of Black-Owned Construction Companies." Center for Economic Studies, U.S. Bureau of the Census.

⁴⁹ See Fairlie, Robert W. and Harry A. Krashinsky. 2006. "Liquidity Constraints, Household Wealth, and Entrepreneurship Revisited"; and Grown. 1991. "Commercial Bank Lending Practices and the Development of Black-Owned Construction Companies."

- Limited access to capital has restricted the growth of African American-owned businesses;⁵⁰ and
- Weak financial capital was identified as a significant reason that more African Americanowned firms than non-Hispanic white-owned firms closed over a four-year period. 51

Bank loans are one of the largest sources of debt for small businesses. ⁵² Discrimination in the application and approval processes of these loans and limited access to other credit resources could be detrimental to the success of minority- and women-owned businesses. Previous investigations have addressed race/ethnicity and gender discrimination in capital markets by evaluating the following:

- Loan denial rates:
- Loan values;
- Interest rates:
- Individual assumptions that loan applications will be rejected;
- Sources of capital; and
- Relationships between start-up capital and business survival.

To examine the role of race/ethnicity and gender in capital markets, the study team analyzed data from the Federal Reserve Board's 1998 and 2003 Survey of Small Business Finances (SSBF) conducted by the Board of Governors, which is the most comprehensive national source of credit characteristics of small firms (those with fewer than 500 employees).

Sample weights are applied to provide representative estimates. The survey contains information on loan denial and interest rates, as well as anecdotal information from firms. The samples from 1998 and 2003 contain records for 3,521 and 4,240 firms, respectively.

The SSBF records the geographic location of firms by Census Division, not city, county or state. Oklahoma is in the West South Central Census Division (referred to in the following discussion as the WSC region).⁵³

Loan denial rates. Figure G-8 shows loan denial rates from the 1998 and 2003 SSBFs for the WSC region and the United States. The 1998 SSBF data for the U.S. reveal the following:

- African American-owned businesses experienced higher rates of denial than all other groups;
- African American-, Hispanic American- and Asian American-owned firms had a loan denial rate considerably above that of non-Hispanic white male-owned firms (in each case a statistically significant difference); and

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⁵⁰ Grown. 1991. "Commercial Bank Lending Practices and the Development of Black-Owned Construction Companies."

⁵¹ Grown. 1991. "Commercial Bank Lending Practices and the Development of Black-Owned Construction Companies."

Data from the 1998 SSBF indicates that 70 percent of loans to small business are from commercial banks. This result is present across all gender, race and ethnic groups with the exception of African Americans, whose rate of lending from commercial banks is even greater than other minorities. See Blanchard, Lloyd, Bo Zhao and John Yinger. 2005. "Do Credit Market Barriers Exist for Minority and Woman Entrepreneurs." *Center for Policy Research, Syracuse University.*

⁵³ The West South Central Census Division includes Oklahoma, Texas, Arkansas and Louisiana.

■ White women-owned firms also had higher rates of loan denial compared to non-Hispanic white male-owned firms, although the difference is not statistically significant.

In 2003, loan denial rates were also higher for each of these groups compared to non-Hispanic white male-owned firms, although the loan denial rate for African American-owned firms was substantially higher than rates for other groups.

Loan denial statistics on individual minority groups in the WSC region are not reported in Figure G-8 due to limited sample sizes. However, about 38 percent of minority- and women-owned firms in the WSC region reported being denied a loan in 1998, compared to 12 percent of non-Hispanic white male-owned businesses. Loan denial rates for minority- and female-owned firms were also higher than those for non-Hispanic white male-owned firms in the WSC region in 2003.

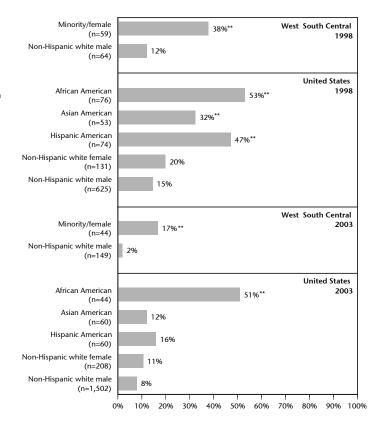
Figure G-8.
Business loan denial rates,
1998 and 2003

Note:

** Denotes that the difference in proportion from non-Hispanic white male-owned firms is statistically significant at the 95% confidence level.

Source:

BBC Research & Consulting from 1998 and 2003 Survey of Small Business Finances.



Regression analyses of loan denial rates. A number of studies have investigated whether disparities in loan denial rates for different race/ethnicity and gender groups exist after controlling for other factors that affect loan approvals. Findings from these studies include:

 Commercial banks are less likely to loan to African American-owned firms than to non-Hispanic white-owned firms after controlling for other factors.⁵⁴

BBC Research & Consulting

⁵⁴ Cavalluzzo, Ken, Linda Cavalluzzo and John Wolken. 2002. "Competition, Small Business Financing and Discrimination: Evidence from a New Survey." *Journal of Business*. 75: 641-679.

- African American, Hispanic American and Asian American men are more likely to be denied a loan than non-Hispanic white men. However, African American borrowers are more likely to apply for a loan.⁵⁵
- Disparities in loan denial rates between African American-owned and non-Hispanic white-owned firms tend to decrease with increasing competitiveness of lender markets.
 A similar phenomenon is observed when considering differences in loan denial rates between male- and female-owned firms.
- The probability of loan denial decreases with greater personal wealth. However, controlling for personal wealth does not resolve the large differences in denial rates across African American-, Hispanic American-, Asian American-, and non-Hispanic white-owned firms. Specifically, information on personal wealth explained some differences for Hispanic- and Asian American-owned firms compared to non-Hispanic whites, but not for African American-owned firms. ⁵⁷
- Loan denial rates are significantly higher for African American-owned firms than non-Hispanic white-owned firms in the presence of several other factors such as creditworthiness and other characteristics. This result is largely insensitive to specification of the model. Consistent evidence on loan denial rates and other indicators of discrimination in credit markets was not found for other minorities and women. ⁵⁸
- Women-owned businesses are no less likely to apply for or to be approved for loans in comparison to firms owned by men.⁵⁹

BBC regression model for the 1998 SSBF. The study team conducted its own analysis of the 1998 SSBF by developing a model to explore the relationships between race/ethnicity/gender of firm ownership and loan denial while controlling for other factors. As discussed above, there is extensive literature on business loan denials that provides the theoretical basis for the regression model. Other studies typically use probit econometric models to investigate the effects of various owner, firm and loan characteristics, including the race and gender of the ownership, or the likelihood of being denied a loan. The standard model includes three general categories of variables, relating to:

- The owner's demographic characteristics (including race and gender), credit and resources;
- The firm's characteristics, credit and financial health; and

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⁵⁵ Coleman, Susan. 2002. "Characteristics and Borrowing Behavior of Small, Women-owned Firms: Evidence from the 1998 National Survey of Small Business Finances." *The Journal of Business and Entrepreneurship*. 151-166.

⁵⁶ Cavalluzzo, 2002. "Competition, Small Business Financing and Discrimination: Evidence from a New Survey."

⁵⁷ Cavalluzzo, Ken and John Wolken. 2002. "Small Business Turndowns, Personal Wealth and Discrimination." FEDS Working Paper No. 2002-35.

⁵⁸ Blanchflower, David G., Phillip B. Levine and David J. Zimmerman. 2003. "Discrimination in the Small Business Credit Market." *The Review of Economics and Statistics*. 85:930-943.

⁵⁹ Coleman. 2002. "Characteristics and Borrowing Behavior of Small, Women-owned Firms: Evidence from the 1998 National Survey of Small Business Finances."

■ The environment in which the firm and lender operate and characteristics of the loan. 60

After excluding a small number of observations where the loan outcome was imputed, the national sample included 931 firms that had applied for a loan during the three years preceding the survey; the WSC region included 118 such firms.

A large number of variables are used to control for differences in the neutral factors described above. A total of 59 variables are included to represent the owner's credit and resources (11 variables); the firm's characteristics, credit and financial health (29 variables); and the environment in which the firm and lender operate including the nature of the loan applied for (19 variables). Given the relatively small sample size and the large number of variables, the study team did not develop a model based on firms located in the WSC region. Instead, all U.S. firms are included in the model and any WSC region effects are estimated by including regional control variables — an approach commonly used in other studies that analyze these data. The regional variables include an indicator variable for firms located in the WSC region and interaction variables that represent firms located in the WSC region that are owned by minorities or women.

Figure G-9 presents the coefficients and t-statistics from the probit model of loan denials.

The results from the model indicate that a number of neutral factors affect the probability of loan denial with statistical significance:

- Having a four-year degree lowers the probability of loan denial.
- Increased equity in the business owner's home if he or she is a homeowner reduces the likelihood of loan denial.
- Business owners who filed for bankruptcy in the past seven years or have had a
 judgment against them are more likely to be denied a loan.
- Family-owned businesses are more likely to be denied.
- Businesses with an existing line of credit, an existing mortgage, or existing vehicle or equipment loans are less likely to be denied a loan. However, firms with outstanding loans from stockholders are more likely to be denied.
- Firms that have been delinquent in business transactions or that filed for bankruptcy in the past seven years have a higher probability of being denied a loan.
- Being in the construction industry increases the likelihood of loan denial.

⁶⁰ See, for example, Blanchard, Lloyd; Zao, Bo and John Yinger. 2005. "Do Credit Barriers Exist for Minority and Women Entrepreneurs?" *Center for Policy Research, Syracuse University*.

⁶¹ Blanchflower, David G.; Levine, Phillip B. and David J. Zimmerman. 2003. "Discrimination in the Small-Business Credit Market." *The Review of Economics and Statistics*. 85(4): 930-943; National Economic Research Associates, Inc., 2008. "Race, Sex, and Business Enterprise: Evidence from the City of Austin." *Prepared for the City of Austin, Texas*; and CRA International. 2007. "Measuring Minority- and Woman-Owned Construction and Professional Service Firm Availability and Utilization. *Prepared for Santa Clara Valley Transportation Authority*.

- Firms in highly concentrated industry segments (as measured by the Herfindahl index) are more likely to be denied.
- Business mortgage applications and vehicle and equipment loan applications are less likely to be denied than other types of business loans.

Even after controlling for potentially neutral influences, firms owned by African Americans and Hispanic Americans remain more likely to have their loans denied than other firms (both statistically significant differences). The indicator variable for the WSC region and the interaction terms for WSC region and minority- and women-ownership are not statistically significant. This result implies that the probabilities of loan denials for minority- and women-owned firms within the WSC region are not statistically different from the U.S. as a whole.

Figure G-9.
Likelihood of business loan denial (probit regression) in the U.S. in the 1998 SSBF,
Dependent variable: loan denial

Variable	Coefficient	t-statistic	Variable	Coefficient	t-statistic	Variable	Coefficient	t-statistic
Race/ethnicity and gender		Firm's characteristics, credit and financial hea	Firm's characteristics, credit and financial health		Firm and lender environment and loan characteristics			
Constant	-5.672231	-4.46 **	D&B credit score = moderate risk	0.559859	1.09	Partnership	0.155744	0.46
African American	1.161171	3.82 **	D&B credit score = average risk	0.672927	1.33	S corporation	-0.175410	-0.76
Asian American	0.421560	1.39	D&B credit score = significant risk	0.377975	0.72	C corporation	-0.226458	-0.83
Hispanic American	0.892690	3.59 **	D&B credit score = high risk	0.446624	0.81	Construction industry	0.511973	1.96 *
Female	-0.077838	-0.42	Total employees	-0.001882	-0.60	Manufacturing industry	0.148291	0.54
West South Central (WSC) region	0.173273	0.60	Percent of business owned by principal	-0.001545	-0.32	Transportation, communications		
African American in WSC region	0.174514	0.32	Family-owned business	0.646944	2.15 **	and utilities industry	0.379124	0.86
Hispanic American in WSC region	0.150945	0.31	Firm purchased	-0.291830	-1.42	Finance, insurance and		
Female in WSC region	-0.007434	-0.02	Firm inherited	0.146407	0.43	real estate industries	-0.249589	-0.70
			Firm age	-0.011829	-1.13	Engineering industry	0.538250	1.43
			Firm has checking account	0.324476	1.00	Other industry	0.231374	1.20
			Firm has savings account	-0.152978	-0.86	Herfindahl index = .10 to .18	2.142435	4.14 **
Owner's characteristics, credit and resources		Firm has line of credit	-0.949337	-5.36 **	Herfindahl index = .18 or above	2.518379	4.80 **	
Age	0.012928	1.56	Existing capital leases	-0.077441	-0.38	Located in MSA	0.117432	0.64
Owner experience	0.007458	0.68	Existing mortgage for business	-0.375032	-1.80 *	Sales market local only	0.093357	0.57
Less than high school education	0.364986	1.05	Existing vehicle loans	-0.542648	-3.00 **	Loan amount	0.000000	-0.13
Some college	-0.122014	-0.59	Existing equipment loans	-0.419369	-1.91 *	Capital lease application	-0.178923	-0.53
Four-year degree	-0.433213	-1.97 *	Existing loans from stockholders	0.582484	2.78 **	Business mortgage application	-0.695362	-2.52 **
Advanced degree	-0.388796	-1.56	Other existing loans	-0.114342	-0.58	Vehicle loan application	-1.234571	-3.80 **
Log of home equity	-0.068199	-3.56 **	Firm used trade credit in past year	-0.189912	-1.17	Equipment loan application	-0.867005	-2.99 **
Bankruptcy in past 7 years	1.141836	2.15 **	Log of total sales in prior year	0.010095	0.15	Loan for other purposes	-0.332726	-1.62
Judgement against in past 3 years	1.050515	3.53 **	Negative sales in prior year	0.543814	0.64			
Log of net worth excluding home	0.011650	0.20	Log of cost of doing business in prior year	-0.002662	-0.05			
Owner has negative net worth	-0.182866	-0.26	Log of total assets	0.027509	0.38			
			Negative total assets	-0.466361	-0.52			
			Log of total equity	0.097975	1.29			
			Negative total equity	1.120468	1.42			
			Firm bankruptcy in past 7 years	0.898655	1.81 *			
			Firm delinquency in business transactions	1.167132	6.30 **			

Note: * Statistically significant at 90% confidence level.

There were insufficient observations to include separate variables for Native Americans at the national level or Asian Americans or Native Americans at the West South Central region level.

Source: BBC Research & Consulting analysis of 1998 SSBF data.

BBC Research & Consulting Appendix G, Page 21

^{**} Statistically significant at 95% confidence level.

The study team simulated loan approval rates for those minority groups with statistically significant disparities (African Americans and Hispanic Americans) and compared observed approval rates with these simulated rates. The study team simulated the rates by inputting observed variables for those minorities into a probit model developed for non-Hispanic white-owned firms that included the effect of a business being in the WSC region. Figure G-10 shows these simulated loan approval rates in comparison to actual approval rates observed in the 1998 SSBF.

Figure G-10.

Comparison of actual loan approval rates to simulated loan approval rates, 1998

	Loan app	oroval rates	Disparity index	
Group	Actual	Benchmark	(100 = parity)	
African Americans	46.4%	78.2%	59	
Hispanic Americans	53.7%	69.8%	77	

Note: Actual approval rates presented here and denial rates in Figure G-8 do not sum to 100%

due to some observations being dropped in the probit regression.

Source: BBC Research & Consulting analysis of 1998 SSBF data.

Based on 1998 SSBF data, the observed loan approval rate was 46 percent for African American-owned firms that applied for loans. Model results show that African American-owned firms would have an approval rate of about 78 percent if they were approved at the same rate as similarly situated firms owned by non-Hispanic whites. In this same environment, Hispanic American-owned firms would be approved for loans about 70 percent of the time, but the actual loan approval rate for Hispanic American-owned firms was 54 percent.

Other researchers' analyses of the 2003 SSBF. Summary statistics from the 2003 SSBF of loan denial rates by race and ethnicity are presented at the beginning of this section. While these data are the most recent information collected from small businesses, the study team selected the data from the 1998 SSBF to conduct the econometric analysis to capitalize on the over-sampling of minority-owned business in the 1998 SSBF (not done in the 2003 SSBF).⁶³

Other recent studies elected to incorporate the 2003 SSBF into the analysis. In a study prepared for the City of Austin, Texas, NERA Economic Consulting (NERA) compared results from models using the 1993, 1998 and 2003 SSBFs, while recognizing the drawbacks of the 2003 SSBF. NERA investigated factors influencing loan denial rates using a probit econometric model. Their results using the 1998 SSBF are consistent with BBC's findings, showing statistically significant disparities for African American-owned firms and Hispanic American-owned firms in the United States. However, when using the 2003 SSBF, they find that loan denial rates for Hispanic-owned firms are

⁶² The approval rate is equal to one minus the denial rate.

⁶³ In the 1998 data, 7.3 percent of the firms surveyed were owned by Hispanic Americans; however in 2003 that number dropped to 4.0 percent. Numbers dropped from 7.7 percent to 2.8 percent and 5.7 percent to 4.2 percent for African American-owned and Asian American-owned firms, respectively. This decrease in minority samples impacts the precision of econometric analysis used to investigate disparities in loan denial rates for minority groups.

not significantly different from non-Hispanic whites. ⁶⁴ The results of NERA's probit regression models at the national level are summarized in Figure G-11.

Figure G-11. Likelihood of loan denial: Results from 2008 NERA Austin study

N	lat	•

N/A: not applicable.

The model specifications included controls for owner characteristics, business characteristics, geographic characteristics, personal financial history, business financial history and use of financial services.

Source:

NERA Economic Consulting, 2008. "Race, Sex and Business Enterprise: Evidence from the City of Austin."

	Statistical significance	Likelihood of loan denial
1998 SSBF		
African American	Yes	Higher
Asian American	No	N/A
Hispanic American	Yes	Higher
Female	No	N/A
2003 SSBF		
African American	Yes	Higher
Asian American	No	N/A
Hispanic American	No	N/A
Female	No	N/A

NERA's model also incorporated an indicator variable for the WSC region (which includes Austin) and interaction terms for individual minority/gender groups in the WSC region. The results for 1998 and 2003 showed no statistically significant differences between loan denial rates in the WSC region and the nation as a whole, for minorities or non-minorities.

CRA International (CRA) also incorporated the 2003 SSBF in a study prepared for the Santa Clara Valley Transportation Authority in California. Their approach was to "combine the 1998 and 2003 SSBFs to increase precision of estimates." Using this approach, a probit econometric model found statistically significant disparities for African American-, Asian American- and Hispanic American-owned businesses at the national level. 65 Consistent with BBC's findings, CRA's results indicate that African American- and Hispanic-owned firms have higher probabilities of loan denial. However, they also found that Asian American-owned firms are more likely to be denied loans.

Applying for loans. Fear of loan denial is a barrier to capital markets because it prevents small businesses from applying for loans and thus can help explain differences in business outcomes. In addition, it provides insight into minority business owners' perceptions of the small business lending market. Figure G-12 shows results from the 1998 and 2003 SSBFs on firms that reported needing credit but did not apply because they feared denial.

In 1998 and 2003, minority- and women-owned firms were more likely to forgo applying for loans due to fear of denial than non-Hispanic white male-owned firms, both in the WSC region and nationally. In 2003, for example, 32 percent of minority- and women-owned firms in the WSC region indicated that they had not applied for loans due to fear of denial, compared to 15 percent of non-Hispanic white male-owned firms, a statistically significant difference. At the national level in 1998 and 2003, this disparity was greatest for African American- and Hispanic American-owned business.

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⁶⁴ National Economic Research Associates, Inc., 2008. "Race, Sex, and Business Enterprise: Evidence from the City of Austin." *Prepared for the City of Austin, Texas.*

⁶⁵ The CRA model also included interaction terms for the Pacific Census Division, which contains California.

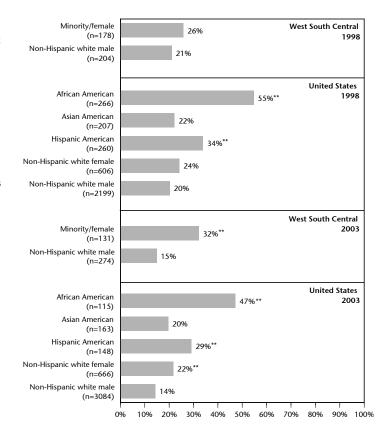
Figure G-12.
Firms that needed loans but did not apply due to fear of denial, 1998 and 2003

Note:

** Denotes that the difference in proportions from non-Hispanic white male-owned firms is statistically significant at the 95% confidence level.

Source:

BBC Research & Consulting from 1998 and 2003 Survey of Small Business Finances.



NERA's study for the City of Austin also included an econometric model to investigate firms that have not applied for loans due to fear of denial. The model explored whether differences between race/ethnicity and gender groups exist after controlling for other factors. Figure G-13 presents a summary of their findings for the WSC region.

Figure G-13.
Fear of loan denial:
Findings from 2008 NERA Austin study,
WSC region only

Note:

N/A: not applicable.

The model specifications included controls for owner characteristics, business characteristics, geographic characteristics, personal financial history, business financial history and use of financial services.

Source:

NERA Economic Consulting, 2008. "Race, Sex and Business Enterprise: Evidence from the City of Austin."

	Statistical significance	Likelihood of not applying for a loan for fear of denial
1998 SSBF		
African American	Yes	Higher
Asian American	No	N/A
Hispanic American	No	N/A
Female	No	N/A
2003 SSBF		
African American	Yes	Higher
Asian American	No	N/A
Hispanic American	No	N/A
Female	No	N/A

NERA's results indicate that African American-owned businesses in the WSC region are more likely to not apply for a loan out for fear of denial, a result also evident at the national level. NERA's national model for 2003 also found that white female-owned businesses were significantly more likely to not apply for a loan out of fear of denial. 66

Other research has identified multiple factors that influence the decision to apply for a loan, such as firm size, firm age, owner age and educational attainment. Controlling for these factors can help to determine whether race and ethnicity explain this fear of loan denial. Findings indicate:

- African American- and Hispanic American-owners are significantly less likely to apply for loans.⁶⁷
- After controlling for educational attainment, there were no significant differences in loan application rates between non-Hispanic white, African American, Hispanic American and Asian American men.⁶⁸
- African American-owned firms are more likely than other firms to report being seriously concerned with credit markets and are less likely to apply for credit for fear of denial.⁶⁹

Loan values. Beyond loan denial rates, the study team considered loan values for firms that received loans. Results from the 1998 and 2003 SSBFs for loan values awarded by ethnicity and race are given in Figure G-14. Comparing loan amounts for non-Hispanic white male-owned firms to minority-and women-owned firms indicates the following:

- In 1998, minority- and women-owned firms in the WSC region received loan amounts that averaged less than loan amounts awarded to non-Hispanic white male-owned firms. In 2003, minority- and women-owned firms in the WSC region received loans that were on average about one quarter of the amount given to non-Hispanic white male-owned firms (a statistically significant difference).
- In 2003, national results show that minority- and women-owned firms received loans that were on average less than one-half the average loan amount received by non-Hispanic white male-owned firms. Minority- and women-owned firms appeared to have received loans with that were on average greater than loans received by non-Hispanic white males in 1998.

In both years, disparities in the mean value of loans for minority- and female-owned businesses compared to non-Hispanic white male-owned businesses were greater in the WSC region than in the United States.

⁶⁶ NERA Economic Consulting, 2008. "Race, Sex and Business Ownership: Evidence from the City of Austin." *Prepared for the City of Austin, Texas.*

⁶⁷ Cavalluzzo, 2002. "Competition, Small Business Financing and Discrimination: Evidence from a New Survey."

⁶⁸ Coleman, Susan. 2004. "Access to Debt Capital for Small Women- and Minority-Owned Firms: Does Educational Attainment Have an Impact?" *Journal of Developmental Entrepreneurship*. 9:127-144.

⁶⁹ Blanchflower et al., 2003. Discrimination in the Small Business Credit Market.

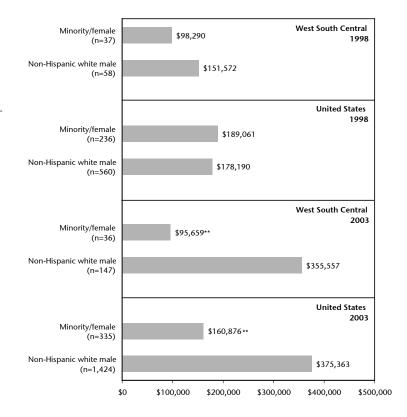
Figure G-14. Mean value of approved business loans, 1998 and 2003

Note:

** Denotes that the difference in means from non-Hispanic white male-owned firms is statistically significant at the 95% confidence level.

Source:

BBC Research & Consulting from 1998 and 2003 Survey of Small Business Finances.



Previous national studies have found that African American-owned firms received substantially lower loan amounts than their non-Hispanic white counterparts with similar characteristics. Examination of construction companies in the United States revealed that African American-owned firms received smaller loans than firms with otherwise identical traits.⁷⁰

Interest rates. Figure G-15 shows the average interest rate on commercial loans from the 1998 and 2003 SSBFs. In 1998, the mean interest rate for minority- and women-owned firms in the WSC region was 0.8 percentage points higher than the mean interest rate for non-Hispanic white maleowned firms. The mean interest rate for minority- and women-owned firms in the WSC region was also higher in 2003.

The pattern seen in the WSC region is similar to that seen nationally. In both 1998 and 2003, the mean interest rate on loans to minority- or female-owned businesses was higher than on loans to non-Hispanic white male-owned businesses.

BBC Research & Consulting

Grown. 1991. "Commercial Bank Lending Practices and the Development of Black-Owned Construction Companies."

Figure G-15.

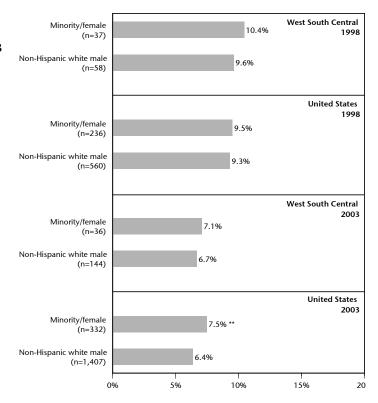
Mean interest rate for business loans, 1998 and 2003

Note:

** Denotes that the difference in means from non-Hispanic white male-owned firms is statistically significant at the 95% confidence level.

Source

BBC Research & Consulting from 1998 and 2003 Survey of Small Business Finances.



Other studies have investigated differences in interest rates across race/ethnicity and gender while controlling for factors such as individual credit history, firm credit history and Dun and Bradstreet credit scores. Findings from these studies include:

- Hispanic-owned firms had significantly higher interest rates for lines of credit in places with less credit market competition. However, no evidence was found that African American- or female-owned firms received different rates.⁷¹
- Among a sample of firms without past credit problems, African American-owned firms paid significantly higher interest rates on approved loans.⁷²

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 $^{^{71}}$ Cavalluzzo. 2002. "Competition, Small Business Financing and Discrimination: Evidence from a New Survey."

 $^{^{72}}$ Blanchflower. 2003. "Discrimination in the Small Business Credit Market."

NERA's 2008 Austin study also investigated differences in interest rates by race/ethnicity and gender using an econometric model that controlled for other factors that may impact interest rates. A summary of the results are shown in Figure G-16. NERA developed models for 1998 and 2003 that included the whole of the U.S. as well as interaction terms for the WSC region.

Figure G-16.
Differences in interest rates:
Findings from 2008 NERA Austin study

† Significant for African Americans in the WSC region

N/A: not applicable.

The model specifications included controls for owner characteristics, business characteristics, geographic characteristics, business performance, personal financial history, business financial history and use of financial services.

Source:

NERA Economic Consulting, 2008. "Race, Sex and Business Enterprise: Evidence from the City of Austin."

Statistical significance	Comparison of interest rates
Yes	Higher
No	N/A
No	N/A
No	N/A
Yes†	Higher
No	N/A
Yes	Higher
No	N/A
	yes No No No Yes† No Yes

NERA's 1998 model found that African American-owned firms in the U.S. pay significantly higher interest rates on business loans, even after controlling for other factors. NERA's 2003 model found that Hispanic American-owned businesses were charged significantly higher interest rates on loans compared to non-Hispanic whites at the national level, and that African Americans were charged significantly higher rates in the WSC region.

Other factors affecting capital markets. Ethnic banking sectors may further affect the availability of loans to different minority groups. For example, one study found strength in the ethnic banking sector influences credit accessibility in ethnic communities in Los Angeles. A strong Asian American bank sector helped Asian American communities develop into successful business environments, and lack of strong banking sectors in African American communities could hinder development of African American businesses. ⁷³

Results of Telephone Interviews with Firms Available for ODOT Work

As part of the disparity study, availability interviews were conducted by telephone with transportation construction and engineering firms in Oklahoma. The study team asked firm owners and managers if they had experienced barriers or difficulties associated with starting or expanding a business. In particular, BBC asked if:

- The firm had experienced difficulties in obtaining lines of credit or loans;
- The firm had experienced difficulties in receiving timely payments.

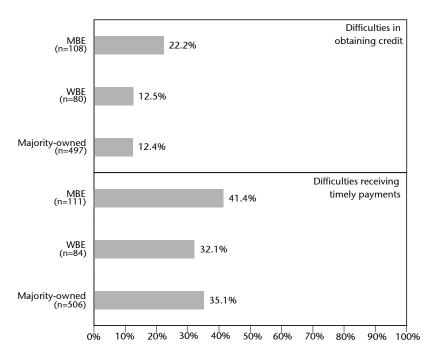
Figure G-17 summarizes the survey responses. Because of the relatively small number of firms for specific minority groups, responses for minority-owned firms are combined. Results for minority

⁷³ Dymski, Gary and Lisa Mohanty. 1999. "Credit and Banking Structure: Asian and African-American Experience in Los Angeles." *The American Economic Review.* 89:362-366.

women-owned firms are reported under MBE. Responses for white women-owned firms are shown for WBE. Responses for construction and engineering firms have been combined.

Figure G-17 indicates that minority-owned firms were almost twice as likely as WBEs and majority-owned firms to report difficulties obtaining credit. Minority-owned firms were also more likely to report difficulties receiving timely payments, which may exacerbate any difficulties obtaining credit. There was little difference in the responses of WBEs and majority-owned firms.

Figure G-17.
Responses to 2010 availability interview questions with transportation construction and engineering firms: any difficulties in obtaining credit or receiving timely payments



Percent of firms responding "yes"

Note: "WBE" represents white women-owned firms, "MBE" represents minority-owned firms and "Majority-owned" represents non-Hispanic white male-owned firms and firms not owned by any single group.

Source: BBC Research & Consulting.

Bonding and Insurance

Bonding is closely related to access to capital. Although little quantitative information exists regarding MBE/WBEs and access to surety bonds for public construction projects, there is anecdotal evidence that suggests such problems persist.⁷⁴

To research whether minority- and women-owned firms in Oklahoma were more likely to experience difficulty obtaining bonding, BBC included this question in the availability interviews completed as part of this study. Figure G-18 shows results:

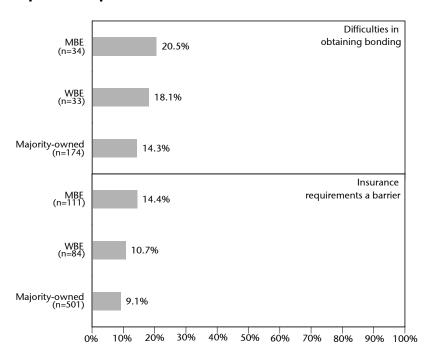
BBC RESEARCH & CONSULTING

⁷⁴ Enchautegui, Maria E. et al. 1997. "Do Minority-Owned Businesses Get a Fair Share of Government Contracts?" *The Urban Institute*: 1-117, p. 56.

- About 21 percent of minority-owned firms reported difficulties obtaining bonding, compared with 14 percent of majority-owned firms.
- About 18 percent of white women-owned firms reported difficulties obtaining bonding.

Firms were also asked if insurance requirements on projects had presented a barrier to bidding. More than 14 percent of minority-owned firms interviewed as part of the availability analysis indicated that insurance requirements were a barrier, higher than found for majority-owned firms (9%). WBEs were slightly more likely than majority-owned firms to report that insurance requirements were a barrier.

Figure G-18.
Responses to 2010 availability interview questions with transportation construction and engineering firms: any difficulties in obtaining bonding and whether insurance requirements present a barrier



Percent of firms responding "yes"

Note: "WBE" represents white women-owned firms, "MBE" represents minority-owned firms and "Majority-owned" represents non-Hispanic white male-owned firms and firms not owned by any single group.

Source: BBC Research & Consulting.

Summary of Analysis of Access to Capital for Business Formation and Success

There is evidence that minorities and women continue to face certain disadvantages in accessing capital necessary to start and expand businesses, based upon analysis of 2000 and 2008 U.S. Census Bureau data and results from the 1998 and 2003 SSBFs.

- Compared to non-Hispanic whites, relatively fewer African Americans, Hispanic Americans and Native Americans in Oklahoma own homes, and those who do own homes tend to have lower home values. Home equity is an important source of capital for business start-up and growth.
- African Americans, Hispanic Americans and Native Americans applying for home mortgages in Oklahoma are more likely than non-minorities to have their applications denied.
- African American, Hispanic American and Native American mortgage borrowers are more likely to have subprime loans.
- Minority- and female-owned businesses in the WSC region are more likely than non-Hispanic white male-owned firms to have loan applications denied.
- African American-owned firms in the WSC region are more likely to not apply for a loan due to fear of denial. When they receive loans, African American- and Hispanicowned firms generally pay higher interest rates.
- The availability interviews indicate that minority-owned firms were nearly twice as likely as women-owned and majority-owned firms to report difficulties in obtaining credit.

Summary of Analysis of Bonding and Insurance

BBC included questions regarding bonding and insurance requirements in the availability interviews completed as part of this study.

- Minority- and women-owned firms were more likely than majority-owned firms to report difficulties obtaining bonding.
- Minority-owned firms interviewed as part of the availability analysis were relatively more likely than women-owned and majority-owned firms to report that insurance requirements were a barrier.

APPENDIX H. Description of Data Sources for Marketplace Analyses

To perform the analyses in Appendices D through G, BBC used data from a range of sources, including U.S. Census Bureau Public Use Micro-samples (PUMS) for the 1980 and 2000 Census and the 2008 American Community Survey (ACS). BBC also analyzed data from the Federal Reserve Board's 1998 and 2003 Survey of Small Business Finances (SSBF) and the 2002 Survey of Business Owners (SBO), conducted by the U.S. Census Bureau.

PUMS Data

Focusing on the construction and engineering industries, the study team used PUMS data to analyze:

- Demographic characteristics;
- Measures of financial resources:
- Educational attainment; and
- Self-employment (business ownership).

PUMS data offer several features ideal for the analyses reported in this study, including historical cross-sectional data, stratified national and state-level samples, and large sample sizes that enable many estimates to be made with a high level of statistical confidence, even for subsets of the population (e.g., ethnic and occupational groups).

BBC obtained selected Census and ACS data via the Minnesota Population Center's Integrated Public Use Micro-data Series (IPUMS). The IPUMS program provides online access to customized, accurate data extracts. For the analyses contained in this report, BBC used the 1980 and 2000 Census 5 percent samples and the 2008 ACS 1 percent sample.

¹ Steven Ruggles, J. Trent Alexander, Katie Genadek, Ronald Goeken, Matthew B. Schroeder, and Matthew Sobek. *Integrated Public Use Microdata Series: Version 5.0* [Machine-readable database]. Minneapolis: University of Minnesota, 2010.

Data for 2000. The 2000 U.S. Census 5 percent sample contains 14,081,466 observations. When applying the Census person-level population weights, this sample represents 281,421,906 people in the United States. The 2000 Oklahoma sub-sample contains 173,843 individual observations, weighted to represent 3,450,058 people.

Categorizing individual race/ethnicity. To define race/ethnicity for the 2000 Census dataset, BBC used the IPUMS race/ethnicity variables RACED and HISPAN to categorize individuals into one of seven groups:

- Non-Hispanic white;
- Hispanic American;
- African American;
- Asian-Pacific American;
- Subcontinent Asian American;
- Native American; and
- Other minority (unspecified)

An individual was considered "non-Hispanic white" if they did not report Hispanic ethnicity and indicated being white only — not in combination with any other race group. All self-identified Hispanic individuals (based on the HISPAN variable) were considered Hispanic American, regardless of any other race or ethnicity identification.

For the five other racial groups, an individual's race/ethnicity was categorized by the first (or only) race group identified in each possible race-type combination. BBC uses a rank ordering methodology similar to the 2000 Census data dictionary rank ordering. An individual who indentified multiple races was placed in the reported race category that ranked highest in BBC's ordering. African American is first, followed by Native American, then Asian-Pacific American and finally Subcontinent Asian American. For example, if an individual identified "Korean," this person belongs in the Asian-Pacific American category; if the individual identified "Korean" in combination with "Black," the individual is considered African American. Again, Hispanic origin overshadowed any other race group identification.

- The Asian-Pacific American category included the following race/ethnic groups: Cambodian, Chamorro, Chinese, Filipino, Guamanian, Hmong, Indonesian, Japanese, Korean, Laotian, Malaysian, Native Hawaiian, Samoan, Taiwanese, Thai, Tongan, and Vietnamese. This category also included other Polynesian, Melanesian and Micronesian races as well as individuals identified as Pacific Islanders.
- The Subcontinent Asian American category included these race groups: Asian Indian (Hindu), Bangladeshi, Pakistani, and Sri Lankan. Individual who identified as "Asian," but were not clearly categorized as Subcontinent Asian were put into the Asian-Pacific group. (Overall, about eight in ten Asians counted in the 2000 Census in Oklahoma were Asian-Pacific Americans.)

- American Indian, Alaska Native and Latin American Indian groups are considered Native American.
- If an individual is identified with any of the above groups and an "other race" group, the individual is categorized into the known category. Individuals identified as "other race" or "white and other race" are categorized as "other minority."

In some cases where sample sizes were small, BBC combined the Asian Pacific American, Subcontinent Asian American and "other minority" category into a single "other" category.

Business ownership. BBC used the Census detailed "class of worker" variable (CLASSWKD) to determine self-employment. Individuals were classified into eight categories.

- Self-employed for a non-incorporated business;
- Self-employed for an incorporated business;
- Wage or salary employee for a private firm;
- Wage or salary employee for a non-profit organization;
- Employee of the Federal government;
- Employee of a State government;
- Employee of a local government; or
- Unpaid family worker.

BBC counted individuals who reported self-employment — either for an incorporated or a non-incorporated business — as business owners.

Defining selected industry sectors. The construction sector is defined using the 2000 Census code for the industry, 077, which is equivalent to the 1997 NAICS code 23. The architectural, engineering and related services industry is Census code 729; corresponding to 1997 NAICS code 5413.²

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² Some variable codes changed during the time of BBC's analyses. For example, coding for the industry variable (IND) changed slightly (industry code 077 became 770) from when the study team began analyzing the Census data. Such changes, however, did not affect the comparability of variables, and all conventions presented in this appendix still applied.

Education variables. BBC used the variable indicating respondents' highest level of educational attainment (EDUCD) to classify individuals into four categories:³

- Less than high school;
- High school diploma;
- Some college or associate's degree; and
- At least a bachelor's degree.

Definition of workers. The universe for the class of worker, industry and occupation variables includes workers 16 years of age or older who are gainfully employed and those who are unemployed but seeking work. "Gainfully employed" means that the worker has reported an occupation as defined by the Census code, OCC.

1980 Census data. BBC compared 2000 Census data with data for the 1980 Census to analyze changes in worker demographics, educational attainment and business ownership over time. The 1980 Census 5 percent sample includes 11,343,120 observations weighted to represent 226,862,400 people. The sample includes 151,298 observations in Oklahoma, weighted to represent 3,025,960 people.

A number of changes in variables and coding took place between the 1980 and 2000 Censuses.

Changes in race/ethnicity categories between censuses. Figure H-1 lists the seven BBC-defined race/ethnic categories with the corresponding 1980 and 2000 Census race groups. Combinations of race types are available in the 2000 Census but not in the 1980 Census. The Bureau of the Census introduced categories in 2000 representing a combination of race types to allow individuals to select multiple races when responding to the questionnaire.

For example, an individual who is primarily white with Native American ancestry could choose the "white and American Indian/Alaska Native" race group in 2000. However, if the same individual received the 1980 Census questionnaire, she would need to choose a single race group — either "white" or "American Indian/Alaska Native." Such a choice would ultimately depend on unknowable factors including how strongly the individual identifies with her Native American heritage.

In addition, the data analyst does not have information about the proportions of individual ancestry in 2000 and can only know that a particular individual has mixed ancestry. The variability introduced by allowing multiple race selection complicates direct comparisons between years with respect to race/ethnicity. Even so, 98 percent of survey respondents in 2000 indicated a single race.⁴

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³ In the 1940-1980 samples, respondents were classified according the highest year of school completed (HIGRADE). In the years after 1980, this method was used only for individuals who did not complete high school, and all high school graduates were categorized based on the highest degree earned (EDUC99). The EDUC variable merges two different schemes for measuring educational attainment by assigning to each degree the typical number of years it takes to earn.

⁴ Grieco, Elizabeth M. & Rachel C. Cassidy. "Overview of Race and Hispanic Origin," *Census 2000 Brief*, March 2001, page 3.

Figure H-1.
BBC race/ethnic categories compared with Census race and Hispanic Origin survey questions, 1980 and 2000

BBC-defined race/ethnic categories	2000 Census	1980 Census
African American	Hispanic origin: no Race: Black/Negro alone or in combination with any other non- Hispanic group	Hispanic origin: no Race: Black/Negro
Asian-Pacific American	Hispanic origin: no Race: Chinese, Taiwanese, Japanese, Filipino, Korean, Vietnamese, Cambodian, Hmong, Laotian, Thai, Indonesian, Malaysian, Samoan, Tongan, Polynesian, Guamanian/Chamorro, Native Hawaiian, Pacific Islander, Micronesian, Melanesian, or other Asian, either alone or in combination with any non-Hispanic, non-Black, or non-Native American groups.	Hispanic origin: no Race: Chinese, Japanese, Filipino, Korean, Vietnamese, Native Hawaiian, Pacific Islander or other Asian
Subcontinent Asian American	Hispanic origin: no Race: Asian Indian, Bangladeshi, Pakistani or Sri Lankan, alone or in combination with white or other groups only	Hispanic origin: no Race: Asian Indian
Hispanic American	Hispanic origin: yes Race: any race groups, alone or in combination with other groups	Hispanic origin: yes Race: any or Hispanic origin: no Race: Spanish
Native American	Hispanic origin: no Race: American Indian or Alaskan Native tribe identified alone or in combination with any non-Hispanic, non-Black group.	Hispanic origin: no Race: American Indian/Alaska Native
Other minority group	Hispanic origin: no Race: other race alone or in combination with white only	Hispanic origin: no Race: other race
Non-Hispanic white	Hispanic origin: no Race: white alone	Hispanic origin: no Race: white

 $Source: \quad BBC \ Research \ \& \ Consulting \ from \ the \ IPUMS \ program: \ http://usa.ipums.org/usa/.$

Business ownership. BBC uses the Census "class of worker" variable (CLASSWKD) to determine self-employment. This variable is the same for 1980 and 2000 with one exception: the 1980 variable does not include a separate category for individuals who work for a wage or salary at a non-profit organization.

Changes in industry codes between censuses. The construction industry is coded as "077" for the 2000 Census and "060" for the 1980 Census. The 2000 Census represents the "architectural, engineering and related services" industry with code "729." In 1980, the code is "882" for "engineering, architectural and surveying services."

Changes in occupational codes between censuses. Occupational codes changed between 1980 and 2000 for the engineering industry. Coded as "53" in 1980, civil engineers were coded as "136" in 2000. Codes for occupations within the construction industry also changed between the two Censuses. Figure H-2 contains the occupational code crosswalk and all job descriptions.

Changes in educational variables between Censuses. The 1980 Census data now includes the same educational variable found in the 2000 Census data, although the questions used for each Census to capture educational attainment differed between the two surveys.⁵

⁵ For a more detailed explanation, see footnote 4.

Figure H-2.
Occupational crosswalk for 1980 and 2000 IPUMS data

Census 2000 occupational title and code	Census 1980 occupational title and code	Job description for 2000 titles
Construction managers 22	Managers and administrators, n.e.c.	Plan, direct, coordinate, or budget, usually through subordinate supervisory personnel, activities concerned with the construction and maintenance of structures, facilities, and systems. Participate in the conceptual development of a construction project and oversee its organization, scheduling, and implementation. Include specialized construction fields, such as carpentry or plumbing. Include general superintendents, project managers, and constructors who manage, coordinate, and supervise the construction process.
First-line supervisors/managers of construction trades and extraction workers 620	Supervisors (categories separated): brickmasons, stonemasons, and tile setters; carpenters and related workers; electricians and power transmission installers; painters, paperhangers and plasterers; plumbers, pipefitters and steamfitters; n.e.c.; and extractive occupations 553-558 & 613	Directly supervise and coordinate the activities of construction or extraction workers.
Construction laborers 626	Construction laborers 869	Perform tasks involving physical labor at building, highway, and heavy construction projects, tunnel and shaft excavations, and demolition sites. May operate hand and power tools of all types: air hammers, earth tampers, cement mixers, small mechanical hoists, surveying and measuring equipment, and a variety of other equipment and instruments. May clean and prepare sites, dig trenches, set braces to support the sides of excavations, erect scaffolding, clean up rubble and debris, and remove asbestos, lead, and other hazardous waste materials. May assist other craft workers. Exclude construction laborers who primarily assist a particular craft worker, and classify them under "helpers, construction trades."

2008 ACS data. BBC also used 2008 ACS data from IPUMS. Conducted by the U.S. Census Bureau, the ACS uses monthly samples to produce annually updated data for the same small areas as the 2000 Census long-form. Since 2005, the ACS has expanded to a roughly 1 percent sample of the population, based on a random sample of housing units in every county in the U.S. (along with the District of Columbia and Puerto Rico).

Applying the person-level population weights to the 3,000,657 observations included in the data, the 2008 ACS represents 304,059,728 people in the U.S. The 2008 ACS includes 36,353 observations for Oklahoma representing 3,642,361 individuals.

With the exception of a few minor differences, the variables available for the 2008 ACS dataset are the same as those available for the 2000 Census 5 percent sample.

Changes in race/ethnicity categories between the 2000 Census and 2008 ACS. The 2000 Census 5 percent sample and the 2008 ACS PUMS data use essentially the same numerical categories for the detailed race variable (RACED). However, in both the samples, any category that represented fewer than 10,000 people was combined with another category. As a result, some PUMS race/ethnicity categories that occur in one sample may not exist in the other, which could lead to inconsistencies between the two samples once the detailed race/ethnicity categories are grouped according to the seven broader categories. This issue is unlikely to affect all but a very small number of observations. PUMS categories that were available in 2000 but not 2008 (or vice versa) represented a very small percentage of the 2000 (or 2008) population. Categories for the Hispanic variable (HISPAN) remained consistent between the two datasets.

Other variables. Other variables used by BBC did not change between 2000 and 2008. The variables CLASSWKD, LABFORCE, IND, OCC, and EDUCD were consistent between datasets, with variable codes in each case representing the same categories.

Survey of Small Business Finances

The study team used the Survey of Small Business Finances (SSBF) to analyze the availability and characteristics of loans among small business enterprises.

The SSBF, conducted every five years by the Federal Reserve Board, collects financial data from non-governmental for-profit firms with fewer than 500 employees. This survey is a nationally representative sample, structured to allow for analysis of specific geographic regions, industry sectors, and gender and racial groups. The SSBF is unique in that it provides detailed data on both firm and owner financial characteristics. For the purposes of this report, BBC used the surveys from 1998 and 2003, which are available at the Federal Reserve Board website.⁷

Data for 1998. The 1998 SSBF includes information from 3,561 small businesses. The survey oversampled minority-owned businesses, allowing for a more precise analysis of how race and ethnicity may affect loan and financial outcomes.

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⁶ U.S. Census Bureau. *Design and Methodology: American Community Survey*. Washington D.C.: U.S. Government Printing 2009. Available at http://www.census.gov/acs/www/SBasics/desgn_meth.htm

⁷ The Federal Reserve Board. Survey of Small Business Finances, 1998 and Survey of Small Business Finances, 2003. Available online at http://www.federalreserve.gov/pubs/.

Categorizing owner race/ethnicity and gender. Definition of race and ethnic groups in the 1998 SSBF are slightly different than the classifications used in the 2000 Census and 2008 ACS. In the Survey, businesses are classified into the following five groups:

- Non-Hispanic white;
- Hispanic American;
- African American;
- Asian American;
- Native American; and
- Other (unspecified).

A business is considered Hispanic American-owned if more than 50 percent of the business was owned by Hispanic Americans, regardless of race. All businesses reporting 50 percent or less Hispanic American ownership are included in the racial group that owns more than half of the company. No firms reported ownership by "other."

Similarly, firms were classified as female-owned if more than 50 percent of the firm was owned by female individuals. Firms owned half by female owners and half by male owners were included in the male category.

Defining selected industry sectors. In the 1998 SSBF, each business was classified according to SIC code and placed into one of eight industry categories:

- Construction;
- Mining;
- Transportation, communications and utilities;
- Finance, insurance and real estate;
- Trade;
- Engineering;
- Services (excluding engineering); or
- Agriculture, forestry and fishing.

Region variables. The SSBF divides the United States into nine regions. Oklahoma is included in the West South Central region.

Loan denial variables. In the 1998 survey, firm owners were asked if they have applied for a loan in the last three years and whether loan applications were always approved, always denied, or sometimes approved and sometimes denied. For the purposes of this study, only firms that were always denied were considered when analyzing loan denial.

Data for 2003. The 2003 SSBF differs from previous surveys in terms of the population surveyed, the variables available and in data reporting methodology.

Population differences. Similar to the 1998 survey, the 2003 survey records data from businesses with 500 or fewer employees. The sample contains data from 4,240 firms, but in 2003, minority-owned firms were not oversampled. In the 1998 data, 7.3 percent of the survey firms were owned by Hispanic Americans, but that number dropped to 4 percent in the 2003 data. Such percentages also dropped for African American-owned (7.7% to 2.8%) and Asian American-owned firms (5.7% to 4.2%). This aspect of the 2003 SSBF may affect the accuracy of analyses related to differences in loan application outcomes for race and ethnicity groups.

Variable differences. In the 2003 SSBF, businesses were able to give responses on owner characteristics for up to three different owners. The data also include a fourth variable that is a weighted average of other answers provided for each question. In order to define race/ethnicity and gender variables consistently from the 1998 to 2003 surveys, BBC used the final weighted average for variables on owner characteristics. Firms were then divided into race, ethnicity and gender groups according to the same guidelines used for the 1998 data.

Industry, region and loan denial variables for the 2003 survey were defined by the study team along the same guidelines as the 1998 survey with one exception. The 2003 survey did not include any firms in the agriculture, forestry and fishing industry.

Data reporting. Due to missing responses to survey questions in both the 1998 and 2003 datasets, data were imputed to fill in missing values. For the 1998 SSBF data, missing values were imputed using a randomized regression model to estimate values based on responses to other questions in the survey. A single variable includes both reported and imputed values, and a separate "shadow variable" can be used to identify where missing values have been imputed. However, the missing values in the 2003 data set were imputed using a different method than in previous studies. In the 1998 survey data, the number of observations in the data set matches the number of firms surveyed. However, the 2003 data includes five implicates, each with imputed values that have been filled in using a randomized regression model. Thus there are 21,200 observations in the 2003 data, five for each of the 4,240 firms surveyed. Across the five implicates, all reported values are identical, whereas imputed values may differ. In both data sets, therefore, when the firm provided an answer to a survey question, that value did not change during imputation; only missing values are predicted and filled in.

As discussed in a recent paper about the 2003 imputations by the Finance and Economics Discussion Series, missing survey values can lead to biased estimates and inaccurate variances and confidence intervals. These problems can be corrected through use of multiple implicates. In order to provide the most accurate analysis, BBC utilized all five implicates provided with the 2003 data in analysis of the survey.

⁸ For a more detailed explanation of imputation methods, see the "Technical Codebook" for the *2003 Survey of Small Business Finances*.

Lieu N. Hazelwood, Traci L. Mach and John D. Wolken. *Alternative Methods of Unit Nonresponse Weight Adjustments: An Application from the 2003 Survey of Small Businesses*. Finance and Economics Discussion Series Divisions of Research and Statistics and Monetary Affairs, Federal Reserve Board. Washington, D.C., 2007. http://www.federalreserve.gov/pubs/feds/2007/200710/200710pap.pdf

Multiple implicates were not provided with the 1998 data, making method of analysis used for the 2003 data inapplicable. To address this, the study team performed analysis two different ways, first only with observations whose data was not imputed and second with all observations; differences in results were insignificant. For summary statistics using SSBF data, BBC included observations with missing values in the analyses. For the probit regression model presented in Appendix G, the study team did not include observations with imputed values for the depended variable, loan denial.

Survey of Business Owners (SBO)

BBC used data from the 2002 SBO to analyze mean annual firm receipts.

The SBO is conducted every five years by the U.S. Census Bureau. The most recent publication of the SBO was collected in 2002. (Data for the 2007 SBO are due to be released by the end of 2010). Response to the survey is mandatory, which ensures comprehensive economic and demographic information for business and business owners in the U.S. All tax-filing businesses are covered in the survey: firms with paid employees and firms without paid employees. In 2002, almost 23 million firms were surveyed.

BBC compiled a subset of the SBO data including number of firms, number of firms with paid employees, number of firms without paid employees, and total receipts. This information was available by geographic location, industry, gender and race/ethnicity.

Data are reported for the U.S. as well as for individual states.

The Census Bureau uses 2007 North American Industry Classification System (NAICS) for classification of industry. BBC analyzed data for firms in all industries and for firms in the construction industry.

To categorize business ownership of firms, the Census Bureau uses standard definitions for womenowned and minority-owned businesses. A business is defined as female-owned if more than half (51 percent or more) of the ownership and control is by women. Firms with joint male-/female-ownership were tabulated as an independent gender category. A business is defined as minority-owned if more than half (51 percent or more) of the ownership and control is African American, Asian, Hispanic, Native American or another minority group. Respondents had the option of selecting one or more racial groups when reporting on business ownership. BBC then analyzed data pertaining to the following six racial categorizations:

- African American
- Asian American
- Native American
- White
- Hispanic
- Non-Hispanic

APPENDIX I. Qualitative Information Concerning the Local Marketplace

Appendix I provides a summary of anecdotal interviews for the Oklahoma Department of Transportation disparity study. A separate table of contents for Appendix I is provided on the following pages.

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APPENDIX I. Summary of Anecdotal Interviews

Introduction and Background

This Anecdotal Interview Report ("Report") was prepared by Holland & Knight LLP with assistance from M & M Business Consultants and Technology Management Solutions, and sets forth the summaries of 58 personal interviews conducted for the Oklahoma Department of Transportation (ODOT). These interviews include perceptions and anecdotes regarding the Disadvantaged Business Enterprise (DBE) Program and the contracting and procurement policies, practices, and procedures of ODOT. The interviews were conducted by Holland & Knight LLP, M & M Business Consultants and Technology Management Solutions.

Interview participants included prime contractors, subcontractors, suppliers, architects, engineers, and trade and business associations, having a membership base of many minority, non-minority, male and female business owners.

Interview participants were obtained primarily from a random sampling of businesses generated by BBC Research & Consulting and stratified by type of firm, location, the race/ethnicity and gender of business ownership, and the DBE directory. Most of the interviews were conducted with the owner, president, chief executive officer, or other officer of the business or association, and some were conducted with a representative. The interviewees are identified in this report by their random interview number.

Of the businesses interviewed, some work exclusively or primarily as prime contractors or subcontractors, and some work as both. The interviewees include minority-owned businesses, female-owned businesses, and non-minority, male-owned businesses. Interviewees were located throughout the State of Oklahoma.

The following trade associations and business organizations agreed to be interviewed in connection with the disparity study and report on the experiences, anecdotes, and perceptions of their members:

- Association of Oklahoma General Contractors¹;
- Greater Oklahoma City Hispanic Chamber of Commerce²;
- Bank of the West Commercial Banking³;

¹ The Association of Oklahoma General Contractors (TA #1) was organized 72 years ago by road and bridge builders. The association provides lobbying, communication, and networking services. The association's membership now consists of approximately 80 prime contractors and 250 subcontractors.

² The Greater Oklahoma City Hispanic Chamber of Commerce (TA #2) has been in existence for 10 years and was started by four Hispanic business owners. The organization provides guidance to start-up businesses and expanding businesses, seminars on managing a business, and networking services. The organization currently has between 350 and 400 business members, which are composed of approximately 50 percent Hispanic businesses and 50 percent non-Hispanic businesses.

- Capital Chamber of Commerce⁴;
- A trade association providing outreach to Native American business owners⁵;
- Greenwood Chamber of Commerce⁶;
- Oklahoma Small Business Development Center⁷;
- Langston University Trucking Cooperative (Oklahoma Minority Trucking, Inc.)⁸;
- A business and economic development agency ⁹; and

³ The Bank of the West Commercial Banking (TA #3) is a bank that has provided financing to African American and Hispanic-owned engineering and construction firms that work with ODOT. The bank has approximately 700 branches and approximately \$66 billion in assets.

⁴ The Capital Chamber of Commerce (TA #4) was founded 21 years ago. The organization provides economic business development assistance, including new business packets, assistance in developing business plans, training, and assistance with business operations. The organization has 103 members, who are involved in multiple businesses and industries and are primarily African American small business owners located in Northeast Oklahoma City.

⁵ TA #5 is a trade association that provides outreach to Native American business owners and other minority-owned businesses. The organization provides assistance in business development, opportunity matching, marketing, and general business coaching and works with companies to create jobs, assists with providing access to capital, and assists with providing access to opportunities within the federal government, state and local governments, and the private sector. The organization provides outreach to tribes through meetings, conferences, and strategic partnerships. The majority of the organization's clients are Native American and work primarily in construction industries, though some work in manufacturing or in food services firms.

⁶ The Greenwood Chamber of Commerce (TA #6) provides technical assistance and services to minority-owned businesses. The organization was founded in 1938 to represent the business interests of Tulsa's African American business community. The organization is primarily funded by grants from the City of Tulsa, the State of Oklahoma, and the federal government. The organization is the landlord for 48,000 square feet of space in the Greenwood Business District and uses this space to assist approximately 200 small start-up businesses annually to grow and mature so that they can stand on their own. The organization also provides micro lending and is certified as a micro lender with the Small Business Administration (SBA).

⁷ The Oklahoma Small Business Development Center (TA #7) was founded 25 years ago when the Small Business Administration provided a grant for organizations to help businesses and stimulate the economy. The organization provides assistance in employment issues, creating business plans, marketing, obtaining loans, performing market analysis, procurement, obtaining government contracts, and writing proposals. The organization assists 200 new clients each year, and these clients are engaged in a wide array of businesses. The organization's membership consists primarily of African American males, but also includes female and Native American members.

The Langston University Trucking Cooperative (Oklahoma Minority Trucking, Inc.) (TA #8) was created to remediate the issues of trucking companies that are unable to win contracts with ODOT and ODOT prime contractors because of their lack of capacity. The organization seeks to provide assistance with collaboration among minority truckers and training. The program is funded by the Oklahoma Department of Transportation and is still in its beginning stages. The cooperative currently has approximately 20 potential members.

- ′	The Northside Chamber of Commerce. 10
ТА#	9 is a business and economic development agency. The organization provides business information to start-up and
existin	g small businesses and minority-owned businesses. The organization provides information about the certifications le and provides assistance with the certification process.

 10 The Northside Chamber of Commerce (TA #10), is a non-profit organization that was founded in 1946. The

organization operates statewide and promotes equal opportunities for African Americans in housing, education and business

development.

Summary of Anecdotes

I. Certification.

A. The certification process.

Some interviewees reported a positive experience with the certification process. [Interviewees #: 6, 11, 13, 14, 25, 27, 28, 29, 40, 41, 43, 44, 45, 46, 47, 48, TA #1, TA #3, TA #6]. Interviewee #6, the African American owner of a DBE-certified trucking company, reported that his firm received his DBE certification so that he could "bid on minority jobs." He said "but I'm really happy to have a certification, but I don't rely on it because ... it's just a portion of work I'm looking for." He said that the certification process was "extensive. I wouldn't necessarily say difficult, but it's thorough ... There's a lot of paperwork involved in it just to guarantee that whoever's applying for certification really deserves certification, and I feel it shouldn't change. It shouldn't be any easier." He reported that his firm "submitted all the paperwork" to become DBE certified with Oklahoma City. He commented that the City's certification process is "not as extensive as ... ODOT's, but ... since [he] completed the ODOT paperwork, the City was 10 times easier because" he could use mayn of the materials from his ODOT application in the City application. He noted that his certification with the City has not yet gone through.

Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, reported that the certification process was easy. He said that all that was required was that they confirm their work and ownership and that they had the equipment to do the work.

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, said that he pursued DBE certification to assist in marketing and in obtaining contracts from ODOT. He also noted that there was political pressure or "political news that ODOT needed to do more work with the African American community and the DBE Program, so I thought ... perfect opportunity; let me see what I can do." He said that the certification process was easy for a design professional.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, reported that the company has been certified as a DBE for almost its entire existence, over ten years. He said that in general, the certification process is arduous and difficult to get through, but he said that it really has to be. He added that he thinks that there are a lot of good resources to assist with the certification process. He said that the renewal process is easy because he has had no major changes in ownership.

Interviewee #25, the Hispanic male owner of a DBE-certified construction firm, stated his experience with the certification process was "good; I only dealt with one person that was very helpful, a real nice lady." He said that he is certified with the State of Oklahoma and with the State of Kansas. He stated that "actually we sent out [certification applications] to about 20 states just within the last couple of weeks since the market around here is kind of slow. If we got five or six states out of the 20 maybe we can do some more highway work."

Interviewee #27, the Caucasian female owner of a DBE-certified erosion control firm, stated that the DBE certification process "is not difficult, but it's time-consuming. It is just a huge compilation of data, but it's very doable."

Interviewee #28, the Native American female president of a trucking and excavating firm, stated that the firm is certified with the Oklahoma Minority Supplier Development Council (OMSDC) and is currently working on the paperwork for 8(a) certification with the Small Business Administration (SBA). She stated that the firm is not certified with ODOT yet, and that she has not started the process because of the amount of paperwork involved. She said that the certification process is easy but completing all of the paperwork is time-consuming.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that he became certified as a DBE with ODOT in May or June of 2009 and recently with the City of Tulsa. He anticipates that the certifications will open the door for additional work opportunities. He stated that the certification process was fairly easy and that he had good communication with the staff at the ODOT DBE Program, who helped him complete the process.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, reported that the firm is not currently certified as a DBE, but in the 1980s, the firm was certified with ODOT as a DBE. He noted that the firm was staying so busy they did not have time to deal with the renewal paperwork and work was constant enough that the firm decided not to renew its certification. Interviewee #40 commented that the certification process was easy but time-consuming.

Interviewee #41, the Hispanic male owner of a DBE-certified trucking firm, stated that the certification process was easy although time-consuming. He noted that the certification process with ODOT was easy because the ODOT DBE office personnel assisted the firm and completed all of the information and paperwork for the firm to become certified.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that the certification process is easy.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that the certification process is easy.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that the certification process is easy.

Interviewee #46, the African American male owner of a DBE-certified safety and environmental consulting firm, stated that the certification process with ODOT was fairly easy.

Interviewee #47, the Caucasian female president of a WBE-certified trucking company, stated that the certification process was not hard.

Interviewee #48, the Native American male president of a WBE-certified construction firm, reported that the certification process was easy.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, stated, "To my knowledge [the certification process] is relatively easy." He said "we have great relationships" with ODOT's DBE Program.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, reported that becoming certified is "not an overly ... cumbersome process." He noted that it requires detail and understanding of the company's financial, management and experience capabilities.

Interviewee TA #6, the president of a minority business development agency, reported that the agency services approximately 200 small minority business owners annually and the majority of them are certified as MBE/WBE/DBE firms through the City of Tulsa. He reported, "It is relatively easy to become certified."

Some interviewees reported challenges in connection with the certification process. [Interviewees #: 2, 4, 5, 7, 10, 16, 19, 23, 34, 35, 37, 38, 42, 46, TA #2, TA #4, TA #5, TA #7, TA #9, TA #10]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, said that the certification process had "a lot of paperwork involved." He said that ODOT wanted to make sure that he was the owner of the firm, and his interview with ODOT went well. He stated that it took between 60 and 90 days to get everything completed and for his firm's certification to be approved.

Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, reported that he shares ownership of the firm with his brothers. He stated that his firm is not certified as an MBE but is certified with the State as a DBE. Interviewee #4 stated that at first he did have some trouble with the certification paperwork. However, he said that he did not ask for help but, instead, did it himself. He reported that the process was difficult but that he did not want anyone to help him because he wanted to do it on his own. He stated that everyone with ODOT has been very helpful and that everything is fine now that his paperwork is complete.

Interviewee #5, the Caucasian male co-owner of a geotechnical engineering firm, said that, although his wife owns a 51 percent interest in the firm, the firm is not certified as a WBE or a DBE because they simply have not filled out the paperwork. He said that he got three-fourths of the way through the application process for ODOT, but "they were asking for financial information or personal" information that he did not want to provide. He described the process as "senseless," and said that he felt "they were asking things that didn't matter" and were inquiring into his personal finances.

Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that his firm is certified as an SBE, but it is not certified as a DBE with ODOT. He said, "The State does a [poor] job of certifying what we do." He added, "The State does not have a real aggressive approach to working with minority businesses with regard to contracting. It's been a bone of contention for a long time. ODOT is probably the best, but to work with ODOT you really need to be in specific construction-related work." He also stated that the firm looked at obtaining DBE certification, but the company did not have the core competency to work in the construction field which is what ODOT primarily requires.

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, reported that the company previously applied for SBE certification but was denied because the president and 26 percent owner of the firm was Caucasian. She said that they were interviewed for certification in 2001 or 2002, and "we just never bothered after that." Interviewee #10 said that the company's interpretation was that the active ownership of the firm must be a minority, and all of their owners are active in the management of their firm. He reported

that it was the understanding of the certifying authority that for an engineering firm, "the principle engineer has to be a minority." He added, "We've got three out of 20" employees that are Caucasian.

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, said that it was a "long process to get certified," and dealing with the certification and renewal process was "not difficult, but cumbersome." He noted that he was certified as both a DBE and an MBE, but he is no longer certified because he did not renew the certificates. He did not renew because "I didn't see any results being a certified DBE ... and also it was too much ... paperwork and too much of invasion of privacy." He said that he did not like having to search for his financial information and submit it "every five years." He said his "biggest concern is that it goes into somebody's hand, and I don't know who is reviewing it." He said that he would not mind completing the certification and renewal process if he had received some benefit out of it, "but I did not get anything out of doing all of those exercises."

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned non-certified engineering firm, indicated that the firm had previously been certified, but has not been certified for several years. Interviewee #19 indicated that the owner decided not to continue to seek certification because he believed it was too much work for very little return.

Interviewee #23, the African American male owner of a DBE/SDBE/MBE-certified security, construction, and food service firm, stated that the firm is currently certified as a DBE, SDBE, MBE, and 8(a). He stated the firm is registered with the City of Tulsa as a bridge participant. He stated the firm is DBE and LDBE certified with Washington Metropolitan Airport Authority and DBE with the Nevada Department of Transportation. He stated that he experienced difficulties with the certification process initially. He stated that he went to Washington and Nevada to obtain his certifications because the process was faster and more flexible than ODOT's process. He stated that ODOT was then forced to recognize the certifications.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm, stated that his wife serves as president of the firm and owns 90 percent of the stock. He stated that it was difficult getting certified as a WBE with ODOT because ODOT expects the female owner to have "hands on experience out in the field and that is not always the case." Interviewee #34 stated, "The office work is just as important as the field work." He said that the firm has considered getting certified as a trucking company because it's easier to get certified as a trucking company with ODOT. He stated, "I know several people that have tried [to become certified as a woman-owned business with ODOT] and been denied. The key, I'm gathering from people who have been certified and those turned down, is if you are trying to get DBE certified as [a] woman-owned [business], then when [the woman business owners] go up for their interview [the ODOT staff] hammers them to death because [they] know [woman business owners] don't know the questions."

Interviewee #35, the Native American female president of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated that initially the certification process was difficult because it is a lot of information to gather. Interviewee #35 stated that the recertification process for the City Tulsa was like starting all over, as if her firm had never been

certified before, because they want to ensure the firm's DBE status. Interviewee #35 stated that the certification process is "doable" but time-consuming.

Interviewee #37, the African American male owner of a DBE-certified engineering firm, stated that the certification process is difficult, particularly for someone just starting out. He stated that someone just starting in business would never be able to fill out the certification application completely the first time, but business owners become familiar with the process over time. He stated that he does believe the certification process is necessary, but requires owners to produce a lot of documentation to document that they are minorities.

Interviewee #38, the Native American female president of an engineering firm, stated that the firm is certified as a minority-owned business. She stated that the firm has not applied for certification with ODOT because she was told that although the president of the firm is the majority stockholder (75 percent) and is a Native American female, she is not a licensed civil engineer and, therefore, certification with ODOT would be difficult. She said that the SBA 8(a) certification process is difficult but most tribal certifications with tribal entities are not difficult.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, reported that the ODOT certification process is tedious. She said that the firm applied for DBE status in the late 1980s and was denied based on ODOT's decision that she did not participate enough in the day-to-day management of the firm because she was employed fulltime outside of the firm until 15 years ago. She reported that she has not reapplied for certification with ODOT. She said that ODOT is the only agency that has denied the firm certification. She stated that she is unsure on what basis ODOT determined that the firm did not qualify for DBE status. She noted that the firm is certified with the Cherokee Nation TERO office, with the City of Tulsa Bridge Program, and with the North Texas Contractors Association as a minority womanowned firm. She said that the City of Tulsa was initially anxious to get the firm involved and certified as a DBE, but since the firm has grown and is now able to perform on million-dollar contracts, the City of Tulsa now wants the firm to subcontract out a portion of their work to other minority businesses. She commented that she disagrees with the City of Tulsa's position on this matter because she can meet the DBE goal on any project, and she should not be forced to subcontract work out to her competitors. She reported that the City of Tulsa notified the firm that due to their size and growth, the firm no longer met the City's criteria to be a minority contractor; however, the firm was never removed from the list of certified minority firms, and the firm still completes a recertification renewal every three years. She added that the firm is not certified with ODOT as a contractor, but it is certified as an ODOT supplier.

Interviewee #46, the African American male owner of a DBE-certified safety and environmental consulting firm, stated that the 8(a) certification was quite difficult and cumbersome.

Interviewee TA #2, the executive director of a Hispanic trade association, reported that the organization's members are approximately 50 percent Hispanic and 50 percent non-Hispanic. He said that fewer than five members are certified. He said that "there is a lot of paperwork involved" and "you have to jump through a lot of hoops" to get certification. He said that he does not know all of the steps to become certified, but he has "heard stories about how difficult it is to become certified."

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, reported that the organization's members are usually MBE/WBE/DBE-certified. He said that the certification "process is very paper-intensive. The complexity of the documents sometimes cause [businesses], especially small businesses with limited expertise, to either hire or locate someone to assist them in completing the paperwork.... It is a difficult process."

Interviewee TA #5, an organization providing outreach to Native American business owners and other minority businesses, stated that less than 10 percent of his membership is certified as MBE/WBE/DBEs. He stated that the certification process is very burdensome and lengthy. He stated that the DBE certification is more stringent and requires more information regarding finances, ownership and control, and bonding capacity versus a WBE certification, which does not really "get deep into those issues." He stated that he definitely understands the concern about ownership and control issues because of prior attempts to create DBEs that were not legitimate.

Interviewee TA #7, the director of an organization that provides assistance to small businesses, reported that "a few" of her clients are certified as a WBE/DBE. Interviewee TA #7 said that the certification process is "somewhat difficult," stating that the process involves a lot of paperwork, financial statements and corporate documents. She said the process is not good for older people or people who are not computer literate.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that the certification process is too difficult, too voluminous and redundant. He said that some questions are redundant to the point that an applicant may not think he answered one question correctly or the question is asked a different way and the applicant answers the question incorrectly. He stated that this comment is not only applicable to the ODOT DBE Program but all programs.

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that the certification process is difficult because of the amount of paperwork required. She reported that there seems to be a gap in communication between the agencies and the applicants.

Other interviewees reported having little to no experience with the certification process. [Interviewees #: 1, 9, 10, 12, 15, 17, 18, 20, 21, 22, 24, 26, 30, 31, 32, 33, 36, 39, TA #2]. Interviewee #9, the African American owner of a non-certified trucking company, said that he is not yet certified. He said that he has "just started learning about [the certifications]."

Interviewee #12, the owner of a female-owned non-certified civil engineering and land surveying firm, reported that the business holds no certifications. She said that the company has not attempted to become certified because she does not know how to do it. She said that she thinks that she should have become certified. She said that she has no knowledge about certification or its benefits.

Interviewee #15, the Caucasian male co-owner and manager of an engineering firm, reported that the co-owner, who is also his wife, is checking into MBE/WBE/DBE certification. He said that she is trying to get on the federal list. He also reported that the firm is in the middle of getting their SBA certification. He said that they did not realize that they should be certified until they put a letter of interest in on a federal job, and the response required certification.

Interviewee #33, the Caucasian male president of an engineering firm, stated that his Caucasian wife owns 55 percent of the firm, and he owns 45 percent of the firm. He stated that the ownership has always been the same. He said that the firm is not certified with the state or any local agency as an MBE/WBE or DBE because the applications ask for too much privileged information about financial statements and salaries that he does not intend to divulge.

Interviewee TA #2, the executive director of a Hispanic trade association, said that the Hispanic population in Oklahoma has not been around for a very long time and has almost tripled in the last 10 years. He said that most Hispanics in the area are very young, "so many of them have not progressed into being ready to do some of the certifications" and have not become involved in many different business sectors. He noted that he has not worked very much ODOT, but he said that he knows that they have a certification program. He added that four or five years ago, they "tried to do some stuff with the certification program, and it just [kind of] fizzled out, and I still don't know why.... There's not been that much of a contact from ODOT."

B. Perceived value to certification.

Some interviewees perceived a value to certification. [Interviewees #: 4, 5, 6, 8, 13, 15, 22, 23, 24, 25, 27, 28, 29, 34, 35, 38, 40, 42, 43, 45, 48, TA #1, TA #2, TA #4, TA #6, TA #9]. Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that he sought DBE certification to open doors other than working for the City. Interviewee #4 reported that there are benefits to DBE certification, including work with prime contractors who work for the State because they are "are always looking for DBE-certified subcontractors." Interviewee #4 stated that 10 percent of his total work is on projects with DBE goals.

Interviewee #5, the Caucasian male co-owner of a geotechnical engineering firm, said that there are probably benefits to certification, like "being able to get work" doing projects in which such certifications are required.

Interviewee #6, the African American owner of a DBE-certified trucking company, stated that "most ... federal jobs have a certain number or a percentage of minority money.... The money can be dispersed in many different ways, so with that, there's going to be a guarantee of a certain amount of minority work coming to minority businesses only. But, there again ... I don't want people to use my firm because I am a minority." He said that he wants people to use his firm "because he gets the job done." Interviewee #6 stated that approximately 90 percent of the firm's work is with ODOT, and about 75 percent of those projects have goals.

Interviewee #8, the African American president and owner of a civil and structural engineering firm, reported that, although he struggled when he was certified years ago, he has a young engineering friend who has just started his business and that this younger engineer feels that the minority certification allows him "to prove himself to the Department." He added, "I'm certain that at some point ... well, actually, right now, they're treating him just like ... anyone else, and that's the way it ought to be." He said that one should look at a person's credentials and "see how they perform." He said that he is very excited about this younger person's chances in the industry. He mentioned that he is considering reapplying for his certification in order to pursue more public sector work.

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, said that since obtaining the certification, he has "obtained a contract with ODOT in January. I've gotten inquiries with larger majority firms that wanted to team up to go after work ... that had a DBE requirement. That's some benefit." He said that he attributes "about 25 percent" of his sales to his DBE certification. He later added that he became DBE certified "to show I can do the work." He added that he "would rather not even be a DBE and get the work because I know then I'm getting the work because you think I do good work, but if the only way to get minorities in front of these agencies is [to have a] DBE goal, that's the way you [have to] go sometimes."

Interviewee #15, the Caucasian male co-owner and manager of an engineering firm, said that he foresees the benefits of certification as including greater participation in government projects. He noted that he is "not looking for a handout — [I] just want to work."

Interviewee #22, the Caucasian male owner of a non-certified aerial mapping firm, stated that his former employer is a woman-owned business. He stated that being a woman-owned business "has helped her a little bit, yeah, there are several jobs she probably wouldn't have gotten."

Interviewee #23, the African American male owner of a DBE/SDBE/MBE-certified [otherwise]security, construction, and food service firm, stated that there are benefits to being certified with different organizations. He stated that "8(a), Hubzone, and SDBE certifications through marketing can and have been beneficial." Interviewee #23 shared that these certifications allow for sole sourcing opportunities from agencies that are familiar with his firm through past work experience. He said that 90 percent of the firm's work came as a result of one or all of the company's certifications.

Interviewee #24, the Caucasian male owner of a utilities construction firm, stated that he has seen some examples of certifications helping other firms, including one example in particular that he felt was unfair to his firm. He further reported that a Native American-owned firm from Minnesota was awarded a sole source contract in Oklahoma, even though his firm is much more experienced.

Interviewee #25, the Hispanic male owner of a DBE-certified construction firm, stated that having the certification has benefited his company significantly. He also reported that "50 percent of his work was helped by the DBE [certification]. All of the bridges in Kansas that we got had a DBE goal on them."

Interviewee #27, the Caucasian female owner of a DBE-certified erosion control firm, stated, "Certification, once you achieve it and receive it, it will make or break you. I mean ,[certification is] the only way you can play in this game. We knew that going in." She stated that 90 percent of her firm's work results from projects with DBE goals.

Interviewee #28, the Native American female president of a trucking and excavating firm, stated that the benefits to being certified are that you gain more knowledge and notification about work opportunities. She said that because the firm is recognized as a minority women-owned firm with the Better Business Bureau, several individuals and firms have contacted them and wanted to work with the firm. She noted that none of the firm's sales come from projects with MBE/WBE/DBE goals.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that he became certified as a DBE with ODOT in May or June of 2009 and recently with the City of Tulsa, anticipating the certifications would open the door for additional work opportunities. He reported that to date he has not been contacted regarding any projects that have a DBE goal.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm, stated that he did see benefits to being certified. He said that "if I can get certified with ODOT," the benefit would be that "I could meet the [DBE] goal that is on the contracts within my own company instead of going outside of my company, which will make my company grow." He noted that 90 percent of the firm's sales results from projects with MBE/WBE/DBE goals.

Interviewee #35, the Caucasian female vice president of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated "We had to be certified [as a DBE]" ... "because if there is federal money involved, there are DBE goals that the contractors have to meet and in order for us to get some of the DBE work, we had to be certified." She stated that the only reason the firm got certified was to be able to go after the work set aside for DBE firms. Interviewee #35 stated, "I think everybody needs viable DBEs ... [because] there's federal money in most of the contracts." She stated that approximately 35 percent of the firm's sales results from projects with MBE/WBE/DBE goals.

Interviewee #38, the Native American female president of an engineering firm, stated that the benefits of being certified with the various Indian Nations' TERO offices is that it supports and encourages the hiring of people from each tribe, keeps dollars in the communities, and opportunities for work are available. She stated that the TERO requires that 1 percent of each contract go back into the tribe for training the workforce. She said that 10 percent of the firm's sales result from projects with MBE/WBE/DBE goals, which is comprised solely of projects derived from Wal-Mart, which has DBE goals on its projects.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that the benefits of being certified are the additional work opportunities that become available because some projects have DBE contracting goals. He stated that there was an advantage to being certified, particularly in his line of work, because there were a very small percentage of firms certified as a DBE in surveying. He added that when the firm was certified, about 10 percent of the firm's sales resulted from projects with MBE/WBE/DBE goals.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that the advantage of being certified is that it allows the firm to bid on a wider range of projects. She added that being certified has helped the firm secure some jobs, particularly with the City of Tulsa, that the firm would not have been able to secure otherwise. She reported that 20 to 25 percent of the firm's sales results from projects with MBE/WBE/DBE goals. She said that the firm has worked on ODOT projects to meet the DBE goals on projects for prime contractors.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that certification gives credibility to the business. Interviewee #43 stated, "One of the main benefits of certification is that

your names is on a list that goes out to the prime contractors ... but word of mouth is your biggest asset."

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that the benefit of being certified is that he gets to put "DBE-certified" on his business card and on his job sign. Interviewee #45 stated that recently he started receiving a lot of information about bid opportunities in the mail, which he believes was the result of recent activities and media coverage about the disparity study. Interviewee #45 stated that even with the increased notices and invitations to bid, he has not received any responses or feedback from the bids he submits. He stated that he believes being certified is his effort as a small business to try to get work.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that ODOT recruited his company to apply for certification because there were no other certified DBE soil stabilization contractors. He stated that one of the benefits of being WBE certified is that there are increased work opportunities for the firm. Interviewee #48 reported that 70 percent of the firm's work is derived from DBE goal projects with ODOT. He stated that prime contractors use the firm to satisfy the DBE goal on ODOT projects.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, said that "several" of their subcontractor members are DBEs. He said that he believes that subcontractors seek their DBE certification "probably because of the advantages." He said that some contracts mandate that a percentage of work go to DBE certified companies, so certification is helpful to minority-owned firms and those just starting out.

Interviewee TA #2, the executive director of a Hispanic trade association, said that he thinks that certification "opens up opportunities for small businesses to succeed and to grow." He related that a lot of Hispanic people perform work doing road construction, "but they're the workers, they're really not the owners of these companies, and one of our goals is to have them become owners of those companies ... and take advantage of some of those services."

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, commented, "The certification process helps businesses ... evaluate their business, take an objective look at both the strengths and the weaknesses and also prepare them to be competitive in the market." He said that the businesses have the certifications "because their primary business is subcontracting for work with government entities.... It helps facilitate the requirements necessary in order to have contracts with both the [federal government] and the state [government]."

Interviewee TA #6, the president of a minority business development agency, stated "We encourage [certification] as an agency because it's an opportunity to be in the pool to do business with the city. The more opportunities they have for procurement, the greater the opportunity they have to grow their business."

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that certifications allow firms to be in databases in order to be connected and receive information about contracting opportunities that could be valuable to the business.

Other interviewees perceived limited or no value to certification. [Interviewees #: 2, 7, 8, 11, 14, 16, 19, 23, 37, 41, 44, 46, 47, TA #3, TA #5, TA #6, TA #7, TA #8, TA #10]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, said that at first everyone told him that he was not getting any work because he was not a certified DBE, so he went through the process to get his DBE certification. He stated that his firm has been certified as a DBE for the past two to three years. He reported, however, that he still has not received work and is frustrated. He said, "As of today I don't understand why I did this because I still have not gotten any work." He attributed zero percent of his sales to his DBE certifications.

Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that certifications are important if they are tracked and if the certifying agencies "ensure that small businesses are small businesses," but he noted that this does not always happen. He also noted that the certifications "help in the bid procurement process when there's small business set-asides. Otherwise ... it doesn't really help that much to be certified." He noted that it goes back to performance and quality, adding, "Too many small businesses believe that by becoming 8(a) certified ... or MBE certified" that they should get business, and "that's not really the way it works.... The certification can open doors," but the certification itself does not lead to the abundance of work they envision. He said that companies still must be able to show through past performance that they are able to do the work, that they are financially able to support the work, and that they can maintain a high level of performance. He commented that the certifications "don't enable you to capture business" by themselves. He added, "The certifications create the opportunity to bid for small business set-aside contracts and to be considered as a minority supplier to certain companies." He noted that his company did capture its "first relationship ... because [the firm was] a minority small business," and the firm was particularly helped by the DOV Indian Incentive Program.

Interviewee #8, the African American president and owner of a civil and structural engineering firm, reported that his company is not currently certified because he feels that "you should be rated on who you are rather than" race or gender. He added that the firm was certified previously and that when he started his firm, he "left the Highway Department in 1980 [and] had no problems getting work from ODOT." He added, "I did eight bridges in the 80s for ODOT." He said, "Things were fine until ... 1988 [when] they went to a 'good faith effort,' and that ... put the responsibility on majority consultants or contractors to get a minority to work with them on a single project, and that wasn't good ... because the majority consultants or contractors [only had to] make the Department aware that they had tried to contact a minority individual that may have been in the field that they were looking for.... They would report that they contacted someone, and then they wouldn't be completely honest about what they were attempting to do." He concluded, "Engineers would send their solicitation out to someone that was in construction. I would receive an invitation to join some construction firm to team up on their project rather than on a service project." He said that this made it seem that certification did not make a difference anyway, so he let his certification lapse in the early 1990s.

Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, reported that the company's certification has not been particularly beneficial. He said that they get invited out to breakfast, but the certification does not seem to help them to get any jobs. He said that none of the company's sales have resulted from the certification. He commented that after you complete all of the paperwork involved in

certification, you receive faxed requests to bid on jobs. However, he said that the company never hears anything back when they respond. He commented that he thinks companies are using his company to satisfy their "good faith effort" requirements, but his company never actually gets any business. He said that out of some \$70 million that was allocated to the State program from the stimulus package, most of the contractors have not received anything. Interviewee #11 reported that certification requires an applicant to complete applications and paperwork, and once the application process is complete, the applicant gets no support, and the uplift that the applicant expects never materializes. He said that this leaves the applicant wondering why he went through all of the trouble of applying when he did not get anything out of it. He commented that the program representatives do not tell you about financing, bonding, insurance, etc. He noted that an applicant has to do a lot more than get the certification. He added that they tell you that you are going to get a lot of work, and then nothing happens.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, said that it was difficult for him to say what benefits result from DBE certification because his 8(a) certification and its limited timeframe has directed him to concentrate on non-Department of Transportation agencies. However, he said that now that he has graduated from 8(a), he is turning his attention to considering DOT work. He reported that he was also DBE-certified while working with a previous company. He noted that then, 15 to 20 years ago, he experienced DBE certification and ODOT subcontracting, and he did not find the DBE certification to serve him very well because "prime contractors had their own preferred DBEs that they used so extensively that I felt excluded from consideration." He also said that at that time, many prime contractors thought negatively of DBE certification because they felt as though the federal government was forcing primes to contract with DBEs and forcing primes to open their doors to DBEs. He said that approximately 70 percent of his work has come from the fact that he was certified 8(a) and as a Small Disadvantaged Business, but he said that there has been a gradation and regression downward as his certification has continued. He said that in the early years, 80 percent of his work came from his 8(a) certification, but only 50 percent of his work resulted from his certification in his later years of 8(a) certification. He said that almost none of his business has come from his DBE certification in the last decade.

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, said that he has "not noticed" any benefits of certification. He said that none of his sales resulted from certification while he was certified. He noted that he was certified as both a DBE and an MBE, but he is no longer certified because he did not renew the certificates. He did not renew because "I didn't see any results being a certified DBE ... and also it was too much ... paperwork and too much of [an] invasion of privacy."

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned non-certified engineering firm, indicated that the firm had previously been certified, but has not been certified for several years. Interviewee #19 indicated that the owner decided not to continue to seek certification because he believed it was too much work for very little return.

Interviewee #23, the African American male owner of a DBE/SDBE/MBE-certified security, construction, and food service firm, stated that "there is no benefit to being DBE certified with ODOT. I can't get utilized by them." He stated that "with the DBE Program there really is not a

benefit" in regards to ODOT. He stated, "You have a certification that is not being utilized or not being acknowledged by ODOT."

Interviewee #37, the African American male owner of a DBE-certified engineering firm, stated that the firm is certified with ODOT as a DBE firm. He stated that the City of Tulsa does not really have a minority certification program but the firm is certified through the City of Tulsa Bridge program as a minority firm, and certified as an 8(a) company with the Small Business Administration. He said that he does believe there are some benefits to certification. He stated that many people are "breaking their necks" to get certified then realize that certification does not help much. He stated that if contractors are looking to meet a goal or use minorities, then certification is useful. Interviewee #37 stated, "For bidding or trying to subcontract I don't think [certification] has been very useful." He stated "I don't think the advantages [of being certified] are as great as most would anticipate."

Interviewee #41, the Hispanic male owner of a DBE-certified trucking firm, reported that the firm has been certified as a DBE with ODOT for six or seven years. He said that the firm became certified as a DBE in order to get better jobs, but he has not seen any benefits to certification. He noted that prior to a recent contract, the firm's DBE status never resulted in a contract working on an ODOT project. He added that the current DBE goal project on which he is working, which is for approximately \$200,000, has no projected profit. He stated that he only started this project 30 days ago, so, currently, none of the firm's revenue has resulted from DBE goal projects.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that there are no benefits to certification. They stated that about 2 percent of their work is derived from projects with DBE goals. Interviewee #44 stated, "The DBE thing is just out there for people to hide behind."

Interviewee #46, the African American male owner of a DBE-certified safety and environmental consulting firm, stated that the firm was certified with the Small Business Administration and ODOT. He said that the 8(a) certification was not productive for him. He stated, "I never got a single job as a result of 8(a) certification or being certified as an MBE or anything else."

Interviewee #47, the Caucasian female president of a WBE-certified trucking company, stated that she has not benefited from being certified. She stated that she got certified because she thought there would be more work opportunities but that has not happened. Interviewee #47 stated that the prime contractors are supposed to use a percentage of minorities on each job,` but it does not happen. She stated that about 5 percent of her work comes from ODOT projects with DBE goals.

Interviewee TA #5, an organization providing outreach to Native American business owners and other minority businesses, said that certification "doesn't carry much weight unless you are 8(a) or HubZone certified." However, he also stated that while the certification process is difficult, it helps narrow the field and opens opportunities for subcontracting. He stated that "ODOT has incentives for primes to use DBEs, but people need guidance from ODOT for getting through the process."

Interviewee TA #6, the president of a minority business development agency, stated "I think [DBE certification] is [not advantageous] because nothing comes of it." Interviewee TA #6 stated that if "a disparity study is being conducted for the State, then one needs to be done for the City of Tulsa. I'm sure the results of that study will come out the same. It's about the 'Good Old Boy Network.'"

Interviewee TA #6 said that "on the surface," there are benefits to being certified; however, he continued that "there is a difference between benefits and results."

Interviewee TA #7, the director of an organization that provides assistance to small businesses, does not feel that the certification process helps minorities, specifically African American minorities. She indicated that it is not necessarily ODOT's fault, but the system has been established such that in order to get a prime contract with ODOT you must have significant equipment, manpower and capital. TA #7 said that once a company is certified, it may have the benefit of certain training programs and networking, but many of her clients are too small and cannot afford to send even one employee to networking events.

Interviewee TA #8, a program coordinator and a special program consultant for a minority trucking cooperative, stated that the benefits of certification should be inclusion in the contracting opportunities awarded by ODOT and prime contractors on ODOT projects. Interviewee TA #8 stated that the minority trucking community is not being awarded contracts on ODOT projects. Interviewee TA #8 stated that only one of the 20 members of the cooperative reported sales from ODOT projects with DBE goals. Interviewee TA #8 reported that members of the cooperative have stated that the inclusion of WBE firms gave ODOT the ability to exclude African American and Hispanic firms; ODOT and prime contractors were able to utilize WBE firms to meet DBE goals, and African American and Hispanic MBE firms still did not get any work.

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that she has not seen a lot of benefits of MBE/WBE/DBE certification. She stated that unless a firm is pursuing government contracts, there is not a lot of benefit realized from any certification. Interviewee TA #10 stated that the MBE and WBE certifications have not benefited those firms in actually obtaining any government contracts. She stated that the DBE certification with ODOT has no benefits. She stated that she believes the SBE or SBD certifications have been beneficial for firms.

Some interviewees identified certain disadvantages to certification. [Interviewees #: 2, 7, 8, 13, 40, 44, TA #2, TA #3, TA #9, TA #10]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, said that there were disadvantages to certification because "it is just costing us money and we are not getting any work."

Interviewee #8, the African American president and owner of a civil and structural engineering firm, said, "The only disadvantage to those types of things is that there's a stigma when you say 'minority.' ... People tend to think that [when] you say minority, you're just not talking about a person, you're talking about an inferior person, and that's the case in most instances." He added that when you work within a minority program, "no one ever believes that you're actually qualified to do what you're doing."

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, said that there are some disadvantages to certification. He noted, "Some ... majority firms ... wanted to put me down and had no intent of using me or didn't know at what capacity they wanted to use me; they just wanted [to contact] me and put me down as a [good faith effort]. I don't necessarily like that part of it."

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that the only disadvantage of being certified is the amount of paperwork required to secure and maintain certification.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that one of the main disadvantages of certification is that oftentimes, when people see that a business owner is a woman, they think she does not know anything. Interviewee #44 stated that another disadvantage to certification is some people believe small and disadvantaged firms are getting something for free. They stated, "[Caucasian] people don't think the government should give us a set-aside job. The [Association of General Contractors has] lobbyist[s] and they are going to keep us down." Interviewee #44 stated that majority prime contractor firms will continue to use the women-owned firms they have helped create.

Interviewee TA #2, the executive director of a Hispanic trade association, said that one disadvantage of certification is that "you have to jump through a lot of hoops" to get certified.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that being registered as a DBE can be a disadvantage because "a majority company knows you're a minority off the bat." He added that certification does not "enhance [a firm's ability] to do work as a subcontractor or as a contractor for ODOT." He commented that certification is "a waste of time." He said that certification does not lead to more contract awards. He said that he thinks that the African American community received less than one tenth of one percent of the awards in 2008.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that the disadvantages of certifications for small business are that the process is costly and requires quite a bit of overhead for the applicants.

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that she did not see any disadvantage to certification other than the time required to complete the certification applications and the likelihood of not receiving any contracts from the certifications.

Other interviewees reported they were unaware of any disadvantages to certification. [Interviewees #: 4, 5, 6, 11, 22, 25, 27, 34, 35, 38, 41, 42, 43, 45, 46, 47, 48, TA #1, TA #5, TA #6, TA #7, TA #8]. Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, said that there are no disadvantages to being certified, but certification does not operate as it should to provide access to government contracts and government money.

Interviewee #46, the African American male owner of a DBE-certified safety and environmental consulting firm, stated "I can't say there are disadvantages [to certification] other than the illusion that if you got your certification it would somehow provide a boost to your company to help it to get some work."

Interviewee TA #5, an organization providing outreach to Native American business owners and other minority businesses, stated that he did not really see a downside to certification other than the ongoing reporting and recertification process.

C. Recommendations regarding the certification process.

Some interviewees recommended that ODOT provide more training or assistance concerning the certification process. [Interviewees #: 27, TA #5, TA #7, TA #10]. Interviewee #27, the Caucasian female owner of a DBE-certified erosion control firm, stated that the people at ODOT who assist with certification "are not really advocates. They need someone desperately who will be an advocate and there to help people who don't have the resources I do to compile their certification books." She also recommended that there be an advocate for applicants when they are unfairly denied.

Interviewee TA #5, an organization providing outreach to Native American business owners and other minority businesses, recommended that ODOT staff receive sensitivity training to prepare them for their interaction with applicants for certification.

Interviewee TA #7, the director of an organization that provides assistance to small businesses, recommended providing training for potential applicants before they actually apply and that ODOT provide that training after hours or on weekends. He recommended that ODOT try to better explain the benefits of certification.

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that to improve the certification process she would recommend that there be more of a liaison between the applicant and the receiving agency.

Some interviewees recommended that the certification application or renewal process be simplified or condensed. [Interviewees #: 5, 25, 34, 37, 38, TA #4, TA #9, TA #10]. Interviewee #5, the Caucasian male co-owner of a geotechnical engineering firm, recommended that the application be shortened.

Interviewee #25, the Hispanic male owner of a DBE-certified construction firm, stated that his only suggestion for the DBE certification process would be "less paperwork, and that some of the questions are asked three or four times, which doesn't seem necessary."

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm, stated that the certification process for woman-owned firms is too difficult. He recommended that ODOT remove the requirement that the female owners have experience out in the field.

Interviewee #37, the African American male owner of a DBE-certified engineering firm, recommended that the certification and recertification process should be simplified. He stated that he understood the need to go through the lengthy initial process to weed out questionable companies, but recertification should be simple. He stated that the recertification process should involve submitting a notarized form declaring that nothing has changed in the business.

Interviewee #38, the Native American female president of an engineering firm, stated that a uniform standardization certification process with one standard certification package would be helpful and improve the entire certification process.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, recommended streamlining "the information so it was not so duplicative."

He also commented that it would be helpful to have a checklist rather than requiring extensive written documentation. He said that he would prefer that the applicants simply be able to present the documents "instead of also having to fill out all of the paperwork with all of the details." He said that he also thought that it "would be helpful if the entities that were helping the businesses [such as my trade association] could ... help compile a lot of the information for them and really concentrate on the specific information related to ... the services and programs that they're trying to contract for."

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that it would be helpful if the certification applications and processes could be streamlined and made available online.

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that to improve the certification process she would recommend that the amount of paperwork be reduced.

Some interviewees recommended that the certification eligibility or certification criteria be modified. [Interviewees #: 2, 7, 42, TA #7]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, recommended that the law should be changed, and if there is going to be a DBE Program, it should have a set-aside for "true minorities" and any ethnic group that is truly disadvantaged but also competent. He said that his firm is over 70 years old, and they are very competent at what they do; he said that that is why he is so disappointed with the lack of work.

Interviewee #7, the Native American owner of a federally-certified aerospace firm, commented that there should be a bigger certification process beyond the construction industry because, right now, certification does not matter beyond the construction industry. He said that "98 percent of the businesses in Oklahoma are small, and a large percentage of those are minority."

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, said that his biggest recommendation concerning the certification process is reciprocity with other states.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that ODOT needs another method of determining criteria related to the involvement in the firm to qualify for certification.

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that the contracts are too large for a small business to succeed and that ODOT needs to "break down the races and genders more."

Some interviewees recommended that the State place emphasis on equitable distribution of work to MBE/WBEs. [Interviewees #: 11, 37]. Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, noted that big contractors need to back up small contractors more. She said that she thinks that each DBE company should get a certain number of jobs from the state for being part of the program.

Interviewee #37, the African American male owner of a DBE-certified engineering firm, stated "I just think there is so much energy put into certification, and making sure people are really on the list, and decertifying people, and reviewing people's forms ... There's so much emphasis on that side of the DBE process but when it comes to equitable distribution of work there doesn't seem to be much emphasis there. So, there should be more benefit to those legitimate companies that are certified."

II. Prime and/or Subcontractor Work.

A. Anecdotes regarding businesses acting as a prime or a subcontractor.

Some interviewees reported principal work as a prime contractor. [Interviewees #: 1, 3, 8, 12, 14, 15, 16, 17, 18, 19, 21, 23, 24, 30, 31, 36, 38, 42, 45, 46]. Interviewee #1, the Caucasian male chief financial officer of a Caucasian male-owned heavy highway and bridge construction firm, said that the company bids as a prime contractor 80 percent of the time and as a subcontractor 20 percent of the time. Interviewee #1 reported that the firm's decision to act as a prime or a subcontractor is dependent on the nature of the work. He stated that when the firm is acting as a subcontractor it will rarely subcontract out any work.

Interviewee #3, the Caucasian male president of a civil engineering firm, said "we typically prime our work" and subcontract out work on a majority of the contracts. He said that they act as a subcontractor "very rarely now ... less than 5 percent [of the time]." He said that the nature of the industry dictates their primary role as a prime contractor. He said that their reputation is to act as a prime contractor due to their experience and expertise.

Interviewee #8, the African American president and owner of a civil and structural engineering firm, reported that he works primarily as a prime. He said that he prefers to be in control, so he prefers acting as a prime.

Interviewee #12, the owner of a female-owned non-certified civil engineering and land surveying firm, reported that the company functions 90 percent of time as a prime contractor because that is the nature of their business.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, reported that the company most often works as a prime because he prefers to be in charge, and as a prime, he does not have to worry about the prime holding his money or refusing to pay. He reported that approximately 15 percent of his work is as a subcontractor and that this has been increasing recently. He said that rather than expanding to a big staff for a short-term job, he would prefer to subcontract out pieces of the job.

Interviewee #15, the Caucasian male co-owner and manager of an engineering firm, reported that he usually functions as a prime because "[i]n the engineering world, you can't have more than one chief.... The civil engineer is the one that generally sets up the site.... The civil is generally the head chief.... That's the nature of the beast." Interviewee #15 said that the firm has not yet worked as a subcontractor.

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, said that the firm functions as a prime contractor "99.99 percent" of the time.

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that his firm works as a prime contractor 80 percent of the time and as a subcontractor 20 percent of the time. He reported that he chooses to work as a prime contractor over a subcontractor because "we have control over our work."

Interviewee #18, the Caucasian male treasurer of a Caucasian male-owned heavy paving and grading construction firm, reported that the firm performs work as a prime contractor 75 percent of the time and that it will work as a prime every time it is able to obtain work as the dominant contractor and the work is within their skill set. He said that if a particular job is primarily bridges or retaining walls but has a paving component, then they will act as a subcontractor.

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned non-certified engineering firm, reported that the company acts as a prime contractor 100 percent of the time. He stated that the decision to act only as a prime contractor is based on the company's desire to rely only upon its own staff. He added that when they act as a prime contractor, they do occasionally seek subcontractors to perform some of the work, but only for geotechnical and surveying work.

Interviewee #21, the Caucasian male general manager of a Caucasian male-owned bridge construction firm, said his company performs 95 percent of their work as a prime contractor. He said that his company works as a prime whenever possible because it likes to be in control of the process. Interviewee #21 indicated that when the firm occasionally acts as a subcontractor, it does not hire additional subcontractors.

Interviewee #23, the African American male owner of a DBE/SDBE/MBE-certified security, construction, and food service firm, reported that "overall we are a prime on 97 percent of the work." He stated that "if I had my way I would probably be a sub all the time. The prime's got a lot of headaches, but at the same time most of the money is with the prime."

Interviewee #24, the Caucasian male owner of a utilities construction firm, reported that his firm acts as the prime in 90 percent of all work performed due the nature of their industry. He further stated that most of his current work is as the prime. He said that he prefers the prime role because "I would much rather work with the person paying our bills than have to go through a second tiertype person." He said that it is usually more lucrative to work as the prime or general contractor.

Interviewee #30, the Caucasian male co-owner of a transportation firm, stated that the firm works 95 percent of the time as a prime contractor and 5 percent of the time as a subcontractor because "there seems to be more money performing as a prime." He reported that he does not subcontract out work when he is hired as a subcontractor.

Interviewee #33, the Caucasian male president of an engineering firm, stated that the firm works as a prime contractor 75 percent of the time and as a subcontractor 25 percent of the time when they are doing structural engineering for other companies' projects. He stated that the scope of the work determines if the company will be the prime or a subcontractor. Interviewee #33 stated that he does sometimes hire subcontractors when he is the subcontractor on a project.

Interviewee #36, a Caucasian female senior engineer of an engineering firm, stated that the firm works 90 percent as a prime contractor and 10 percent as a subcontractor. She stated that the scope of the project dictates whether the firm will act as the prime contractor or the subcontractor. She

stated, "A lot of time we work as a sub for local smaller companies who perhaps don't have the range of services we can offer."

Interviewee #38, the Native American female president of an engineering firm, stated that the firm works as a prime 80 percent of the time and as a subcontractor 20 percent of the time.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, reported that the firm works as a prime contractor 75 percent of the time and as a subcontractor 25 percent of the time. She said that the recent economy may require that the firm do more subcontracting work and less prime work. She added that the type of project dictates whether the firm will bid as a prime or a subcontractor. She commented that the firm does not subcontract out work when they are hired as subcontractor.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that the firm works as a prime contractor mainly in the private sector and as a subcontractor for public sector work. He stated that the firm works as a prime 90 percent of the time because the firm hardly ever gets subcontracting opportunities. He stated that when he is hired as a subcontractor, the firm may subcontract out work if they need extra truckers to complete a project.

Interviewee #46, the African American male owner of a DBE-certified safety and environmental consulting firm, stated the majority of the jobs the firm has completed have been in prime contractor role because the jobs have been small and he has been able to do the work himself. He stated that the firm has teamed with another environmental firm on a small job where he was the prime contractor and he hired a larger firm to be a subcontractor to provide services in an area he did have the expertise.

Some interviewees reported principal work as a subcontractor due to the nature of their work, size of the job, or a general preference to work as a subcontractor. [Interviewees #: 5, 6, 7, 9, 10, 22, 25, 27, 28, 31, 32, 34, 35, 37, 40, 41, 43, 48, TA #3, TA #8]. Interviewee #5, the Caucasian male co-owner of a geotechnical engineering firm, reported that he usually functions as a subcontractor. However, he said that he acts as a prime 25 percent of the time. He indicated that he generally works as a subcontractor on public projects in which he works for a selected architect or engineer.

Interviewee #6, the African American owner of a DBE-certified trucking company, reported that he works as a subcontractor 100 percent of the time because "trucking ... will only come to a sub, because the jobs ... [are] all up under the umbrella of road building, and trucking falls up under that."

Interviewee #7, the Native American owner of a federally-certified aerospace firm, reported that his firm is currently the "prime contractor on three efforts and [a] subcontractor on five." He noted that being a subcontractor "eliminates a lot of the bid and procurement process when you go in trying to bid and support a contract effort."

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, reported that the firm functions more often as a subcontractor because design work is usually a subcontractor service. However, he reported that the firm functions primarily as a prime for some major public clients because they work directly as the owner. He said that in many

cases, they are a subcontractor-consultant to the prime doing design work. He said that they have also acted as a subcontractor-consultant for bridge designers.

Interviewee #22, the Caucasian male owner of a non-certified aerial mapping firm, stated that he has worked as both a prime and a subcontractor for different jobs. He stated that 80 percent of his jobs are as a subcontractor. He stated that he prefers to work as a subcontractor because there are fewer headaches.

Interviewee #25, the Hispanic male owner of a DBE-certified construction firm, said that he has no experience working as the prime contractor because of the nature of his business. He commented that there are not opportunities to work as a prime while offering only limited services.

Interviewee #27, the Caucasian female owner of a DBE-certified erosion control firm, stated that 100 percent of their firm's work is as a subcontractor. She stated that the work available for her firm in the industry is only for subcontractors and that there are no opportunities for her firm to act as prime.

Interviewee #28, the Native American female president of a trucking and excavating firm, stated that the firm performs solely as a subcontractor because of the nature of the work they perform. She stated that they very seldom subcontract out work when they are hired as a subcontractor. She said that they try to handle their entire scope of work on a project but if they need assistance they will occasionally subcontractor out work.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated that the firm works as a prime contractor for 30 percent of the time and as a subcontractor 70 percent of the time. She stated that the particular job dictates if the firm works as a prime or subcontractor. Interviewee #31 stated that work in the public sector, such as City or County road projects, is very specific and requires that the firm perform as a prime contractor whereas private projects require working for a general contractor, and the firm only performs part of the overall project, such as parking lots. Interviewee #31 stated that when the firm is hired as a subcontractor they sometimes subcontract out work.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that the firm works as a prime contractor 25-30 percent of the time and as a subcontractor 70-75 percent of the time. She stated that the size of a specific job and the number of jobs on the bid letting dictates whether the firm is a prime or subcontractor on projects. Interviewee #32 stated that the firm sometimes subcontracts out work when they are hired as a subcontractor. She stated that the scope of the work dictates if the firm subcontracts out the work and if the terms of the contract allow subcontracting.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm stated that the firm works as a prime contractor 10 percent of the time and a subcontractor 90 percent of the time. He stated that the size of the job dictates which role the firm plays on a particular project. He stated that very large contracts require him to work as a subcontractor.

Interviewee #35, the Native American female president of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated that the firm performs solely as a

subcontractor because of the nature of the type of work they perform and has only had three jobs in 11 years that the firm has worked as the prime contractor.

Interviewee #37, the African American male owner of a DBE-certified engineering firm, stated that the firm works as a prime contractor 40 percent of the time and subcontractor 60 percent of the time.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that the firm is very seldom a prime contractor. Interviewee #40 noted that when the firm is hired as a subcontractor, the firm does not subcontract out work because the firm is not allowed to subcontract.

Interviewee #41, the Hispanic male owner of a DBE-certified trucking firm, stated that the nature of the trucking industry requires that the firm work solely as a subcontractor. He reported that other companies and prime contractors solicit the firm to work on projects.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that the firm works as a subcontractor 85 percent of the time and as a prime contractor 15 percent of the time.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that the firm just started working as a prime last year and has only been a prime once in 500 jobs. He stated that the firm works as a subcontractor 100 percent of the time because the firm is a small company and stabilization is a service that is a contracted job on projects. Interviewee #48 stated that when the firm is hired as a subcontractor the firm does not hire other subcontractors.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that his clients work primarily as subcontractors for primes, but one client works as a prime. He noted that the subcontractors are doing primarily concrete work.

Interviewee TA #8, a program coordinator and a special program consultant for a minority trucking cooperative, stated that the members of the cooperative perform work as subcontractors because of the nature of their work.

Some interviewees reported acting primarily as a subcontractor due to their limited capacity which is sometimes related to an inability to secure bonding or financing. [Interviewees #: 2, 11, 26, 29, 47, TA #2, TA #4, TA #5, TA #6, TA #7, TA #9, TA #10]. Interviewee #2, the Hispanic male owner of a DBE-certified concrete paving firm, said that he works 100 percent of the time as a subcontractor. He said that he has the knowledge and competence to work as a general contractor, but he does not have the financial backing. He said, "bonding requirements and insurance play a major role" in allowing a subcontractor to move to a prime contractor. He added, "It takes a lot of money."

Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, said that the company is looking into being a prime contractor, but for now it acts solely as a subcontractor because of limited funding. However, he noted that sometimes the company will hire subcontractors.

Interviewee #26, a supervising manager of a Caucasian-owned construction firm, shared that the firm works as a subcontractor 95 percent of the time and the prime only 5 percent. He stated that "I would prefer to do much more prime work so we could make a bigger profit and have more control." He stated that "only on certain projects when we deal directly with the city or town do we work as the prime." He noted that it seems fewer and fewer prime contracting opportunities are being posted for bids.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that the firm performs solely as a subcontractor because he is not familiar with the bidding process. He stated that he is hoping that the DBE certification with ODOT will provide additional opportunities. He reported that he knows that he will have to become familiar with the bid process. He said that by nature of the trucking industry, he does not anticipate ever using subcontractors to complete projects, but he would use MBE/WBE/DBE subcontractors.

Interviewee #47, the Caucasian female president of a WBE-certified trucking company, stated that the firm only works as a subcontractor because it takes so much money to perform as a prime contractor. She stated that her firm is able to secure bonds because "I've paid my bills and I've got a good record," but the cost of equipment is "absolutely" too high. She stated that ODOT inspects the trucks regularly and they will shut down the company on a project if the trucks exceed the bridge capacity.

Interviewee TA #2, the executive director of a Hispanic trade association, said that most of the organization's members act as subcontractors. He noted that the organization has no prime contractors. He said that he is not sure if the opportunity is not there or if the entities are not "equipped with the right tools" or qualifications "that it takes to be a prime contractor. I think a lot of it is lack of education as well."

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, reported that most of the organization's members function as subcontractors because "the financial requirements to be a primary contractor are pretty intensive. In northeast Oklahoma City, we don't have that many individuals or companies that have [the] financial capacity to really be a prime on most contracts. There are some exceptions ... but it's the exception and not the rule." He added that when members do function as primes, this occurs for work doing "building construction and component of a highway or road project ... It wasn't ... a major stretch."

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that the majority of his clients work as subcontractors. He stated that some companies function as both prime and subcontractors, which is dictated by the size of the project, nature and scope of work, and bonding capacity required on any specific project. Interviewee TA #5 stated, "As an example, a larger contract of \$2 million may be outside a company's bonding capacity and becomes the limiting factor for firms."

Interviewee TA #6, the president of a minority business development agency, stated that his clients perform work as subcontractors because of their capacity to perform work. He stated that his clients are small businesses and do not have the capacity to handle the magnitude of larger jobs as prime contractors, so it is easier to bid as subcontractors. Interviewee TA #6 stated that his clients do not subcontract out work.

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that 100 percent of her clients are subcontractors, some of which are subcontractors of other subcontractors. She attributed this role to a lack of resources, capital and manpower, as well as a "closed market" that allows the same prime contractors to always get the awards and hire the same subcontractors.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that his clients perform work as subcontractors because of their capacity to perform work. He stated that his clients are small businesses and do not have the capacity to handle the magnitude of larger job as prime contractors. He stated that from conversations with clients, he understands that most of the small and minority businesses would prefer to be prime contractors but are prohibited from bidding and working as prime contractors because they are unable to satisfy the bonding and insurance requirements. He stated that the majority of the small and minority firms work as subcontractors because of the firms' inability to obtain bonding.

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that her client base works as a subcontractor 90 percent of the time because it is difficult to secure the required bonding and the needed collateral to be a prime contractor. She stated that working as a subcontractor requires less bonding capacity.

Some interviewees reported acting equally as a prime and subcontractor. [Interviewees #: 4, 13, 20, 39, 44]. Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, reported that the firm's work as a prime contractor versus a subcontractor is split 50-50. He stated that when his firm started out they worked primarily as a subcontractor; however, he started to work as a prime contractor when he became pregualified as a contractor with the various cities.

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, said that he spends approximately 50 percent of his time working as a prime and 50 percent of his time working as a subcontractor, but right now he is acting 100 percent as a prime for ODOT.

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, said that his company works as a subcontractor approximately 50 percent of the time. He noted that he attributes whether the company works as a subcontractor or as a prime contractor to the way the projects are offered. He further stated that when the firm is hired as a subcontractor, they hire subcontractors.

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that the firm works equally as a prime and subcontractor. She stated that the firm works mainly as a subcontractor for private sector projects and as a prime contractor for public sector projects. She stated that in the private sector, the firm is only one of the contractors needed on a project and therefore performs as a subcontractor.

B. Contractor -reported utilization of DBE and non-DBE subcontractors in the public and private sectors.

Some interviewees reported utilization of minority- and female-owned subcontracting firms in both the private and public sectors. [Interviewees #: 1, 3, 6, 21, 37, 38, 39, 42, 44, 45, TA #1, TA #4, TA #5, TA #10]. Interviewee #1, the Caucasian male chief financial officer of a Caucasian male-owned heavy highway and bridge construction firm, said that his firm does solicit DBE subcontractors depending upon what the project entails and whether there is a federal requirement. He reported that the firm utilizes the same DBE firms that it always utilizes and that there are generally six DBE subcontractors that his firm uses on both public sector and private sector work.

Interviewee #3, the Caucasian male president of a civil engineering firm, reported that although they do not generally subcontract out work in the private sector, his firm would utilize the same subcontractors as they do in the public sector. He said that they have had a particularly good experience working with one female-owned firm, and "I would use her on everything if I could."

Interviewee #6, the African American owner of a DBE-certified trucking company, reported that he does solicit MBE/WBE/DBE subcontractors. He said that he looks to the DBE goals for the number of DBE contractors that he needs to hire, and he will use DBE companies for other jobs, but often these companies cannot supply all of the equipment required. He said that there are DBEs that he uses in both the public and private sector.

Interviewee #21, the Caucasian male general manager of a Caucasian male-owned bridge construction firm, said his company solicits quotes from DBEs "every month" when the bid letting information is released. He said the company sends e-mails and faxes to both DBEs and non-DBEs. He said that part of the reason for doing so is the requirement of making a good faith effort to secure minority participation. He said that there are DBE subcontractors that his company also uses for private sector work. He noted that they develop relationships and end up using the same businesses regardless of their minority status.

Interviewee #37, the African American male owner of a DBE-certified engineering firm, stated that he does solicit MBE/WBE/DBE subs for bids and quotes. He said that he subcontracts 60-70 percent of the work to other MBE/WBE/DBE firms and the other percentage is not subcontracted to MBE/WBE/DBE firms only because he does not know of any that can perform the work. He stated, "I always solicit DBE participation by calling or sending an e-mail that says 'I'm getting ready to get started on a project that needs these particular services and would you be interested in partnering on it?" He stated, "The reason I use DBE [-certified firms] is because we all struggle in the same area" and working with his firm affords some of the DBE firms a higher profile in the government area and teaming on projects helps them out as well as his firm. He stated that the choice to select and use MBE/WBE/DBE firms does not differ for public versus private sector projects, although his firm tends to lean toward public sector projects.

Interviewee #38, the Native American female president of an engineering firm, stated that the firm always solicits MBE/WBE/DBE firms for subcontracting opportunities on all projects because "as a minority-owned firm we like to see other minority-owned firms prosper." She stated that the method for selecting subcontractors does not differ when working on private and public sector projects or projects that have a DBE goal and non-DBE goal projects. She stated that the majority

of the work the firm performs is tribal and the firm first looks to hire other tribal businesses as subcontractors over other businesses in the local area as subcontractors.

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that the firm always solicits MBE/WBE/DBE subs for bids and quotes depending on the trades required for a specific project. She reported that the only time the solicitation process is different is when the project is a tribal job that requires a Native American preferences for all subcontracting. She reported that the firm has a long-standing relationship with minority firms and has many projects utilizing minority subcontractors. Interviewee #39 stated that anytime the firm has a project to bid, the firm will solicit bids from DBE firms and it does not differ between public and private sector jobs, especially if the firm has a good relationship with the MBE/WBE/DBE firm and the firm knows the subcontractor is reliable.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, reported that the firm uses the same minority contractors in the public and private sectors and for DBE goal projects and non-DBE goal projects. She stated that the firm always solicits MBE/WBE/DBE subcontractors for bids or quotes on projects that require subcontractors and that the firm consciously seeks out MBE/WBE/DBE subcontractors whenever the firm needs a subcontractor. She reported that if some work requires a specialty and the firm does not already know a DBE contractor in that area, the firm will review the DBE listings provided by the appropriate agencies bidding the work and make contact with capable DBE firms. She added that the method by which the firm identifies, solicits and uses DBE contractors does not differ for MBE/WBE/DBE goal projects versus non-goal projects, or for private sector projects versus public sector projects.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing stated that the firm does not solicit only MBE/WBE/DBE firms. Interviewee #43 stated, "If I can hire a minority, I [would] rather hire a minority, but I really hire based on [a firm's] credibility and it doesn't matter who they are. I've got some minorities who have worked for us for years." Interviewee #43 stated that the firm uses the same firms in both the private and public sector and does not utilize any DBE firms exclusively for one sector. Interviewee #43 stated that there are no MBE/WBE/DBE subs the firm uses for public sector projects that the firm does not also use in the private sector.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that the firm solicits MBEs as often as they can. He reported that Oklahoma City had a business development center in the past and all of the minority contractors in the State would come by all the time. He stated that the Oklahoma City Business Development Center published a directory of minority-owned businesses and he used that directory to find minority subcontractors. Interviewee #44 stated that the firm deliberately solicits African American MBE firms as subcontractors. Interviewee #44 stated, "I think that we should be like the other ethnic groups. They hire their own — why shouldn't we hire our own?" They stated that there are no MBE/WBE/DBE subs the firm uses for public sector projects that the firm does not also use in the private sector.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that the firm always solicits MBE/WBE/DBE subs for bids for additional work. He stated that of

the 25 minority owners and operators the firm has leased trucks from, 23 were African Americanowned businesses. Interviewee #45 stated that the firm uses the same subcontractor owner and operator for all projects regardless of public versus private sector or DBE goal versus non-DBE goal project.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, said that his members solicit DBE subcontractors for projects on "every contract bid ... because it is required." He said that the prime contractors and DBE subcontractors both reach out to each other. He said that it was his understanding that DBE participation is only required on projects utilizing federal dollars. TA #1 said that he "would bet" that prime contractors using a DBE in the public sector would also use the DBE in the private sector but noted that most of his members do not perform private sector work. He referenced two DBE subcontractors in particular who have positive relationships with prime contractors that he believes would translate across the public and private sectors.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, said that the organization's membership does engage in subcontracting and noted, "They actually try, as much as possible, ... to utilize minority firms ... to help with the work, which is one of the nice advantages about having minority prime contractors.... [T]hey're more sensitive and more aggressive in seeking out individuals to contract with as subcontractors, whereas [with] other contractors, it's more of a relationship [based] arrangement." He added, "With the history of [America] ... a lot of those established relationships were established before minority companies even had an opportunity to even get in the game." He reported that the organization's members do use some subcontractors in both the public and private sectors. He said, "Through relationships and the ability to do the work, you're going to go back to entities that you can count on to ensure that the work gets done." He said that primes use the organization's members on both public and private sector work. He noted, "probably 70–80 percent ... go to public sector work ... so there's not a lot of private work that they've been able to access."

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, reported that the primes that use his clients on public sector work also use them on private sector work. Interviewee TA #5 stated that his clients frequently solicit MBE/WBE/DBE firms for bids and quotes, and this is motivated by the desire to fulfill DBE goals on projects. He stated that after the performance is there, the desire to seek out or solicit a particular DBE is spurred by proven levels of performance. However, he reported that there do not seem to be a lot of firms seeking DBE firms for private sector work. Interviewee TA #5 stated that he believes a company might initially differentiate between using a DBE subcontractor on public versus private sector work because there is an incentive to fulfill a DBE goal.

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that her clients tend to try to utilize small disadvantaged and minority firms whenever possible, probably 85 percent of the time, for all projects in the private and public sector projects.

Other interviewees reported utilization of minority- and female-owned subcontracting firms in either the private or public sector, but not necessarily both. [Interviewees #: 2, 4, 7, 11, 14, 16, 17, 18, 23, 32, 33, 34, 35, 36, 40, 47]. Interviewee #2, the Hispanic male owner of DBE-

certified concrete paving firm, said that on projects with DBE goals, his firm's participation usually satisfies the goal, "but I also try to share my work with [DBEs] that I know need work." He said that when hiring subcontractors he would try to contact DBEs he knows and bring them "under my wing," directing them toward areas in which they are more competent.

Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that he did utilize a DBE on a public sector project for the City.

Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that the company does not use the same DBE subcontractors that it uses for public projects in private projects because they do not need them there. He added that there is only one subcontractor with whom he works on public work, and he rarely needs subcontractors on private work.

Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, said that the company usually solicits other certified companies to subcontract work to.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, reported that he finds and selects his subcontractors through relationships and through networks of certified DBEs and 8(a)s. He reported that he has always tried to look within those pools to build relationships. He said that in the DBE world, there is enough work, so it is less competitive, and it is beneficial to help each other out.

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, said that there are some minority businesses with which he would work in the public sector and with which he would not work in the private sector. He said that the work determines whether he uses particular subcontractors.

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, reported that his firm does not do any work in the private sector and therefore does not utilize subcontractors in the private sector. He reported that 99 percent of their public sector work is with ODOT. He stated that his firm solicits DBE subcontractors every month because it is required on some contracts. Interviewee #17 explained that he is able to identify DBE subcontractors through a list organized by discipline and provided by ODOT. He stated that his firm solicits DBE subcontractors on projects that do and do not have goals because they have a list of subcontractors that they solicit every month and "it is easy."

Interviewee #18, the Caucasian male treasurer of a Caucasian male-owned heavy paving and grading construction firm, stated that his company solicits MBE/WBE/DBE subcontractors for bids and quotes. He noted that they "always" solicit such subcontractors because all of the projects on which his company acts as a prime contractor have participation requirements. He added that he was unable to describe the difference between public sector and private sector solicitation of DBEs because his firm does very little private sector work.

Interviewee #23, the African American male owner of a DBE/SDBE/MBE-certified security, construction, and food service firm, stated that as a prime to obtain subs he goes through the SBA, CCR, and another minority resource firm. He reported that his firm, as the prime, attempts to identify certified firms for subcontracting work even if there are no goals on the projects.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that the firm only works on public sector projects and does not do any private sector work. She stated that the firm never solicits MBE/WBE/DBEs. She reported that subcontractors submit unsolicited bids to their office because the firm is listed as a plan holder on a particular project. She also noted that some of the projects the firm works on do have MBE/WBE/DBE goals and that the president has a resource he uses to identify MBE/WBE/DBEs subcontractors.

Interviewee #33, the Caucasian male president of an engineering firm, stated that there are no MBE/WBE/DBE subcontractors that he uses for public sector project that he also uses for private sector work.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm, stated that he frequently solicits MBE/WBE/DBE subs for bids and quotes. He said that there are some MBE/WBE/DBE subcontractors he uses for public sector projects that he does not use for private sector work because their pricing is too high. He stated that he only uses DBE firms when projects have an MBE/WBE/DBE goal and uses the list of DBE firms available from ODOT. Interviewee #34 stated that his firm does not use DBE firms on private sector work unless the DBE firm produces a product that his firm cannot.

Interviewee #35, the Native American female president of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated that the firm rarely uses subcontractors in the public sector and that they do not use subcontractors in the private sector. She stated that when they do use subcontractors they use a DBE-certified firm with whom they have an existing relationship.

Interviewee #36, a Caucasian female senior engineer of an engineering firm, stated that the firm frequently solicits MBE/WBE/DBE subs for bids and quotes and particularly for all state and federal contracts. She stated that the firm solicits MBE/WBE/DBE subs for bids and quotes based on prior relationships with the MBE/WBE/DBE firms. She stated that for private sector work, typically the firm does not specifically solicit MBE/WBE/DBEs. She stated that the firm has a lot of MBE/WBE/DBE subcontractors and may use MBE/WBE/DBEs for private sector projects but they do not specifically identify portions of private sector projects for DBE participation. She stated that the firm does not differ how it solicits and seeks bids from MBE/WBE/DBEs on those project that have an identified MBE/WBE/DBE goal projects versus non-goal projects.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that the firm does not use subcontractors for private sector projects because private sector projects usually do not require subcontractors. He added that in the past, the firm used an African American firm out of Oklahoma City for aerial mapping and photogrammetric engineering.

Interviewee #47, the Caucasian female president of a WBE-certified trucking company, stated that she solicits other MBE/WBE/DBE firms for bids and quotes because she does not mind sharing the work with other small companies. Interviewee #47 stated that the subcontractor selection process does not differ on goal projects versus non-goal projects.

Some interviewees reported limited to no utilization of minority- and female-owned subcontracting firms. [Interviewees #: 4, 5, 9, 10, 19, 22, 26, 28, 30, 31, 33, 41, 46].

Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, noted that he does not currently need a DBE for a project with a DBE goal. He stated that he would solicit a DBE on a non-DBE goal project, but he has not done that yet.

Interviewee #5, the Caucasian male co-owner of a geotechnical engineering firm, said that he has not solicited a certified firm because he does not know of any such firms being available. He said that he did not recall working with any certified minority subcontractors.

Interviewee #9, the African American owner of a non-certified trucking company, said that he has not yet solicited an MBE/WBE/DBE firm, but he would solicit one.

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, said that the company does not specifically solicit MBE/WBE/DBE. He said that he does not think that there are any DBEs qualified for the work that they need to have second-tier subcontractors.

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned non-certified engineering firm, said that his firm does not solicit DBE firms, but he indicated that because ODOT is increasingly requiring the use of DBE firms, his company will likely start using DBE subcontractors in the future. Interviewee #19 indicated that the company did not have experience working with DBE subcontractors.

Interviewee #22, the Caucasian male owner of a non-certified aerial mapping firm, said he has used a woman-owned subcontractor on a couple of jobs. He stated that he has not solicited other MBE/WBE/DBE firms as subcontractors.

Interviewee #26, a supervising manager of a Caucasian-owned construction firm, shared that his firm focuses on "taking care of the customer, making sure that their project is kept on schedule and that the work that they receive is done safely and efficiently. We are willing to work with anyone who can deliver for our customer, but we do not deliberately seek out minority or female-owned firms." He reported that his firm does not solicit bids based on ownership or certifications.

Interviewee #28, the Native American female president of a trucking and excavating firm, stated that the firm never solicits MBE/WBE/DBE subs for bids and quotes, but stated they have been advised they should start.

Interviewee #30, the Caucasian male co-owner of a transportation firm, stated that he does not solicit MBE/WBE/DBE firms and that he does not have any experience working with DBE firms.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated that the firm never solicits MBE/WBE/DBE subcontractors for bids/quotes, because they always use the same contractors they are familiar with all the time. Interviewee #31 stated that the fact that the firm never solicits MBE/WBE/DBE subcontractors does not differ between the public and private sector. She stated the company does not bid on projects with DBE goals, so they do not solicit DBE subcontractors. She stated that the firm does not have any experience working with DBE subcontractors. However, Interviewee #31 reported the

firm's utilization or method for selecting subs does not differ for MBE/WBE/DBE versus non-MBE/WBE/DBE firms.

Interviewee #33, the Caucasian male president of an engineering firm stated that he rarely solicits MBE/WBE/DBE subcontractors for bids or quotes and only when it is required by the project. He stated that when MBE/WBE/DBE subcontractors are required for projects, he knows two or three firms that he contacts and uses all the time. Interviewee #33 stated he does not believe MBE/WBE/DBE participation should be a requirement. He stated that the firm's solicitation and use of MBE/WBE/DBE subcontractors for projects does not differ for public and private sector work or between MBE/WBE/DBE goal projects versus non-goal projects.

Interviewee #41, the Hispanic male owner of a DBE-certified trucking firm, noted that the firm does not seek other DBE firms because his firm can meet any DBE goal requirement by itself, and, in any event, his firm has never gotten a DBE job before.

Interviewee #46, the African American male owner of a DBE-certified safety and environmental consulting firm, stated the firm has never solicited DBE firms for price quotes because he just recently re-entered the market, but he would look at subcontractors' capability and experience as determining factors.

Some interviewees reported that there is no difference in hiring subcontractors for public and private jobs. [Interviewees #: 1, 4, 5, 6, 9, 10, 11, 16, 18, 26, 28, 29, 30, 31, 33, 36, 37, 38, 39, 40, 43, 44, 45, 46, 47, TA #5]. Interviewee #1, the Caucasian male chief financial officer of a Caucasian male-owned heavy highway and bridge construction firm, said that the process for hiring subcontractors is the same across the public and private sectors.

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, reported that the company uses essentially the same subcontractors on both private and public sectors. He said that if they find a good a subcontractor, then they stick with him. He said that they do not bid out work.

Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, said that the company solicits the same subcontractors to work in the public and private sectors.

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, said that this process would not differ in the public and private sectors "unless public sector has any certain requirements for selecting the sub — then we'll follow that." He noted that he has not worked on a project with goals or requirements.

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that his firm selects subcontractors through "competitive bidding." He stated that his firm hires subcontractors to perform erosion control, guardrail, traffic control and asphalt. He stated that the process for soliciting DBEs is no different between projects with goals and projects without goals.

Interviewee #33, the Caucasian male president of an engineering firm, stated that he uses the same subcontractors for private sector and public sector projects, and the selection process does not differ.

Interviewee #36, a Caucasian female senior engineer of an engineering firm stated that the firm uses the same subcontractors for both public and private sector projects. She stated that the firm has not identified any subcontractors that they use strictly for one sector over the over. She stated that her firm uses MBE/WBE/DBE subs based on the subcontractors' capabilities.

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that the process for selecting subcontractors does not differ for private sector jobs compared with public sector jobs. She stated that the firm uses MBE/WBE/DBE firms in both the private and public sector and does not utilize any DBE firm exclusively for one sector only. She stated that there are no MBE/WBE/DBE subs the firm uses for public sector projects that the firm does not also use in the private sector.

Other interviewees reported that sometimes there is a difference in hiring subcontractors for public and private jobs. [Interviewees #: 3, 4, 7, 14, 20, 21, TA #10]. Interviewee #3, the Caucasian male president of a civil engineering firm, said that selection of subcontractors across the public and private sectors is dependent on the project itself. He said that "it is a small field," and different subcontractors are good at different types of work. He said that if he is working for ODOT, "they will want to have at least a little say" regarding the subcontractor so that they know that the subcontractor has the necessary experience. "We all know who has the experience to do that type of work." Interviewee #3 said that in the private sector the developer may be more concerned about the bottom line and does not care who the subcontractor is.

Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that the DBE has more rights than the normal person, and in the private sector, if he does not need a DBE, he is not going to use a DBE.

Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that his solicitation of MBE/WBE/DBEs may differ on projects with minority goals. He said that the company does not use the same DBE subcontractors that it uses for public projects in private projects because they do not need them there.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, said that the process of selecting subcontractors is different for public and private sector jobs. He said that for government projects, he looks for subcontractors that have experience and knowledge concerning compliance on federal contracts, prevailing wage scale, and more stringent scheduling requirements. He said that he starts with that and then, depending if the award is on best value, he has to balance between the subcontractor with the best price and those subcontractors that can perform and are experienced.

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, said that his company solicits bids from MBE/WBE/DBEs approximately 20 percent of the time. He indicated that he does so because of ODOT requirements. He further stated that this amount is more than the amount that is solicited on private sector jobs. Interviewee #20 indicated that there are no subcontractors that his company employs on public sector work that they would not employ on private sector work. He said that he selects subcontractors based on competitive bidding. He said that this is different than in the private sector, in which the owner or person hiring for the job usually selects the subcontractors.

Interviewee #21, the Caucasian male general manager of a Caucasian male-owned bridge construction firm, said that the bidding on public jobs is different than on private sector jobs. He said there are DBE subs that his company uses for public sector work that they do not use for private sector work.

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that the private sector allows more freedom in selecting subcontractors whereas the public sector has a more stringent selection processes.

Some interviewees reported selecting subcontractors based on price, reliability, and quality of work. [Interviewees #: 1, 3, 6, 7,10, 11,17, 20, 21, 26, 28, TA #1]. Interviewee #1, the Caucasian male chief financial officer of a Caucasian male-owned heavy highway and bridge construction firm, stated that his company looks at subcontractor firms from an integrity standpoint.

Interviewee #3, the Caucasian male president of a civil engineering firm, said that they select their subcontractors based on reputation. He said, "In our industry ... there is a very select group of folks who can [do the job] and do it right ... We are very selective because our name and our reputation is at stake for our sub's work."

Interviewee #6, the African American owner of a DBE-certified trucking company, stated that when he hires a subcontractor, he looks at the company's reputation, "the quality of work that they can do and have done, and equipment."

Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that when the company selects a subcontractor, it looks at the potential subcontractor's "core competency and capabilities, past performance and the areas of expertise we need," financial information, whether they are slow to pay, the company's credit history, and reputation.

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, said that the company selects subcontractors by determining who can get the job done at a reasonable price.

Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, reported that the company selects its contractors based on pricing and availability. He added that the subcontractors have to be able to get the job done quickly.

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that his firm selects subcontractors through competitive bidding.

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, said that he selects subcontractors based on competitive bidding.

Interviewee #21, the Caucasian male general manager of a Caucasian male-owned bridge construction firm, said that the firm selects subcontractors based on the lowest price. He said certain subcontractors will not be considered if they have had quality or performance issues in the past, but otherwise, lowest price is the only factor considered.

Interviewee #26, a supervising manager of a Caucasian-owned construction firm, stated that his firm selects subcontractors based on prior relationships and pricing. He stated "on the material end of it, it's based on price and service. Then on some of the other end of it, like concrete cutting, it's based on availability and who can get the job done quickest and keeps the project rolling."

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, said that prime contractors select subcontractors based on three things: "price, experience, and relationships." He said that they polled their membership and asked them to "tell us what is most important to you." He said that those three issues rated the highest.

Some interviewees reported that they prefer to use subcontractors with whom they have an existing relationship. [Interviewees #: 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 14, 16, 17, 18, 19, 20, 22, 23, 26, 28, 30, 31, 32, 33, 34, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 47, TA #1, TA #4, TA #5, TA #10]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, stated that he solicits subcontractors that he knows and with whom he has worked. He said that "most of the time but not all of time" he will try to work with subcontractors with whom he has an established relationship.

Interviewee #4 the Hispanic male owner of a DBE-certified construction firm, reported that he generally hires subcontractors that he knows and stated that he has years of experience that have allowed him to know qualified subcontractors. He reported that he has worked with the same subcontractors for many years, and he tries to use them repeatedly.

Interviewee #5, the Caucasian male co-owner of a geotechnical engineering firm, said that when he subcontracts out work, he hires someone that he uses all of the time. He noted that he has used the same subcontractor since 2005.

Interviewee #6, the African American owner of a DBE-certified trucking company, stated that there are subcontractors with whom his firm works on a regular basis. He said, "Even though we're all competitors to an extent, we all will come together if need be ... to help one another on a job."

Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that there are subcontractors with whom he has an established relationship and that he likes to use as much as possible.

Interviewee #9, the African American owner of a non-certified trucking company, said that he selects subcontractors from people he knows and word of mouth.

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, said that there are subcontractors with whom they have established relationships and that the company uses all of the time.

Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, noted that there are subcontractors with whom his company has a relationship and that the company tries to use all of the time. He commented that the company often hires subcontractors with whom he is familiar through past work experience or that he met at a conference.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, stated that he has a core base of subcontractors that he has built over the years because he has developed such a specialized contract history, and he needs a knowledgeable subcontract base. He said that there are subcontractors with whom he has built relationships and tries to use all of the time. He said that there is a core pool of subcontractors that he likes to use because "if it's not broke, don't fix it."

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, reported that he has established relationships with some subcontractors that he likes to use all of the time. He said that he selects second-tier subcontractors by "working with them for a long time, knowing their capabilities and their resources," and their knowledge concerning the project.

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that his firm does "not necessarily" have particular subcontractors that they work with all of the time. Rather, he stated that his firm has "numerous" subcontractors with whom they work and has "weeded out" over the years the people with whom they do not want to work.

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned non-certified engineering firm, reported that the company only approaches companies with which they have worked in the past, unless they are working in a new region for the first time.

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, said that there are MBE/WBE/DBE subcontractors that his company has established relationships with that they use regardless of whether the project has goals.

Interviewee #22, the Caucasian male owner of a non-certified aerial mapping firm, said that he does have a subcontractor that he uses frequently. He stated "I always go to him. He has 45 years [of experience] in the field."

Interviewee #23, the African American male owner of a DBE/SDBE/MBE-certified security, construction, and food service firm, said that he uses the same subs that he has had positive experiences with. He reported that there are two primes that his firm prefers to do business with based on past experience.

Interviewee #26, a supervising manager of a Caucasian-owned construction firm, said that he prefers to work with subs with whom they have an existing relationship. He stated that "we have a core group of about three suppliers for our piping materials that we use. We give them all three equal opportunity to bid for us."

Interviewee #28, the Native American female president of a trucking and excavating firm, stated that when the firm needs subcontractors, they typically contact contractors they have worked with before and know to be dependable.

Interviewee #30, the Caucasian male co-owner of a transportation firm, stated that he has a few contacts, and he goes back to those same subcontractors.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated that the firm selects subcontractors that are credible, those with whom they are familiar, and those with whom they have past work experience. She stated that the firm has a select group of contractors they work with all the time. Interviewee #31 added that the firm has established relationship with particular subcontractors and tries to use the same subcontractors all the time.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that there are some subcontractors with whom the firm has an established relationship, and the firm tries to use them all the time based on past work experience and capability.

Interviewee #33, the Caucasian male president of an engineering firm, stated that he hires people he has worked with before to be subcontractors on particular projects. Interviewee #33 stated that what is most important to him is finding reliable people to work on his projects. He stated, "I think it is wrong to require DBE goals" on projects. He stated that he has established relationships with two or three particular subcontractors that he uses all the time based on their past performance and proven track record.

Interviewee #37, the African American male owner of a DBE-certified engineering firm, stated that there are particular subs he has established relationships with and tries to use all the time. He stated that in particular there is a DBE supplier of paper and copier products as well as a DBE firm who is a mechanical engineering firm that he frequently uses.

Interviewee #38, the Native American female president of an engineering firm, stated that there are subs they have established relationships with and try to use all the time. She stated that the firm has a group of subs that are all Native American that they join with to form a team to work on projects. She stated that forming a team to work on projects helps everyone feel comfortable, especially knowing the team has worked together before.

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that there are some subs that the firm has established relationships with and tries to use all the time because they are MBE/WBE/DBE subcontractors.

Interviewee #41, the Hispanic male owner of a DBE-certified trucking firm, noted that when the firm is hired as a subcontractor, the firm does subcontract out some of the work to ensure that projects are completed in a timely manner. He said that he hires subcontractors with whom he is familiar, such as his cousins' trucking firm.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that the firm has identified minority contractors that the firm likes to use on all contracts that require concrete subcontractors.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that the firm sometimes hires truckers that the firm is familiar with as subcontractors because they feel comfortable with the subcontractor's credibility. Interviewee #43 stated that the firm makes telephone calls to subcontractors to solicit pricing and quotes for projects.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that they hire subcontractors that they already know through word of mouth. He stated that he attends the AGC meetings and has become familiar with the various contractors. Interviewee #44 stated that he maintains a list of subcontractors and calls on those firms he has worked with in the past for subcontracting opportunities. He stated, "We use the 'Good Old Boy System.' We have our own black 'Good Old Boy System.'"

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that the firm has established relationships with some particular firms that they try to use all the time. He stated that there is a particular minority trucking firm that the firm prefers to use because the subcontractor performs the same whether getting paid by the hour or by the load.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, said that there are subcontractors with whom his members have established relationships. "It's back to those three elements, [price, experience and relationships]. If you have three DBEs and their prices are all the same and they all have excellent track records, you are going to pick the one that you know. I think it's human nature."

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, reported that the organization's members do have some established relationships with subcontractors who they use all of the time. He said, "Through relationships and the ability to do the work, you're going to go back to entities that you can count on to ensure that the work gets done."

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that typically his clients select potential subcontractors for projects based on long standing relationships, referrals from other firms, and past experience from within the local market.

Some interviewees reported that there are certain subcontractors that they choose not to work with. [Interviewees #: 3, 4, 6, 7, 11, 16, 17, 18, 20, 23, 26, 29, 31, 34, 35, 36, 37, 38, 39, 42, 43, 44, 45, 47, TA #1, TA #5, TA #10]. Interviewee #3, the Caucasian male president of a civil engineering firm, said that there are subcontractors that he will not work with but does not distinguish between DBE and non-DBE firms in that regard. He said, "I look at who is best to meet my needs and do a good job," and he does not consider firms based upon their DBE status.

Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, reported that there are certain subcontractors that he will not work with because of the quality of their work; he reported that these are non-DBE subcontractors.

Interviewee #6, the African American owner of a DBE-certified trucking company, said that there are some subcontractors with whom he will not work because "their equipment was not suitable or just cannot stand up to the job.... You learn quickly who you can and cannot call or who you can and cannot depend on. That's across the board."

Interviewee #7, the Native American owner of a federally-certified aerospace firm, reported that there are some subcontractors with whom he will not work because they do not have good financial

histories or past performance records. He added that he has to ensure that his subcontractors live up to consumers' expectations as any company must.

Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, noted that there is one subcontractor (a non-DBE) with whom he will not work because that subcontractor did not do his job and would not fulfill his contract.

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, said that there are some subcontractors with whom he will not work "if they don't have services I'm asking for — if they cannot perform."

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, reported that there are subcontractors — both DBE and non-DBE — that his firm will not work with due to "non- performance."

Interviewee #18, the Caucasian male treasurer of a Caucasian male-owned heavy paving and grading construction firm, said there are "probably some" subcontractors that his company will not work with, but that it has nothing to do with DBE status; the level of competence of the subcontractor determines that. Interviewee #18 indicated that there is a group of 10 to 15 subcontractors that do 90 percent of his firm's subcontract work because they use the same ones over and over and establish trust, rapport, etc.

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, said there are subcontractors his company will not work with but that this has nothing to do with the MBE/WBE/DBE status of the subcontractor.

Interviewee #23, the African American male owner of a DBE/SDBE/MBE-certified security, construction, and food service firm, stated that he is only aware of one sub used in the past that will no longer be allowed to work with his firm due to the sub's personal conduct.

Interviewee #26, a supervising manager of a Caucasian-owned construction firm, shared that there is one subcontractor that his firm will not engage with in the future. He reported that this subcontractor did an extremely poor job on a city contract which cost his firm quite a bit in repairs and delays.

Interviewee #30, the Caucasian male co-owner of a transportation firm, stated that a firm's work performance is the only reason he will not use a firm again.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, reported that she does not have any experience working with DBE subcontractors. She stated that there are some subcontractors with whom the firm will not work based on performance and track record, but she said that the firm "doesn't have a blacklist of subs."

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm, reported that there are subs he will not work with because of their reputation or non-performance.

Interviewee #35, the Native American female president of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated that the firm will not work with some DBE and non-DBE subcontractors based on the subcontractor's performance and inability to provide quality work.

Interviewee #36, a Caucasian female senior engineer of an engineering firm, stated that there are subs she will not work with based primarily on specific individuals and their personalities and egos, not based on any subgroup such as MBE/WBE/DBE versus non-MBE/WBE/DBE status.

Interviewee #37, the African American male owner of a DBE-certified engineering firm, stated that the DBE subs he will not work with are those with whom he has had direct experience and who did not perform in a timely manner or do good work. He stated, "This applies to all subcontractors whether they are DBEs or non-DBEs."

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, reported that there are a few subcontractors the firm will not use again because of poor workmanship; one failed to pay their bills and the firm had to pay them. He reported that those firms were not MBE/WBE/DBE firms.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that there are some subcontractors with whom the firm will not work because of the subcontractor's past performance history.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that there are some subs with whom the firm will not work because of the way they conduct business and do not appreciate the value of someone else's time and money.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, said he was not aware of any subcontractors that his members would refuse to work with, although, he added, "I'm sure there are some."

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that based on past performance levels, work experience, and ethical issues, there are some subcontractors with whom his clients will not work.

Other interviewees reported that there are no subcontractors with whom they would not work. [Interviewees #: 2, 5, 9, 10, 22, 28, 32, 33, 40, TA #4]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, said that there are "not really" any subcontractors that he will not work with. He said that he tries to bring in and train the subcontractors that do not know what they are doing.

Interviewee #5, the Caucasian male co-owner of a geotechnical engineering firm, reported that there are no subcontractors with whom he will not work. He added that necessity rules if you need to get the work done.

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, commented that the company will pretty much will work with all subcontractors. He noted that "even the ones that are mad at us still come back to do work for us."

Interviewee #22, the Caucasian male owner of a non-certified aerial mapping firm, stated that he has not come across any subcontractors that he refuses to do work with.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that there are not any subcontractors with whom they will not work, whether MBE/WBE/DBE or non-MBE/WBE/DBE firms.

Interviewee #33, the Caucasian male president of an engineering firm, stated that he has not had any experiences that have resulted in subcontractors with whom he will not work, including MBE/WBE/DBE and non-MBE/WBE/DBE subcontractors.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that he has not had any bad experiences working with subcontractors and, therefore, does not have any subcontractors with whom the firm will not work.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, reported that he has "never heard anyone say they won't work [with a particular subcontractor]. I have heard some frustrations with some companies, i.e., ... where they were solicited for proposals, but they never give these entities ... the work." He said that the perception is that these companies "have who they want to work with, and it's more for appearances that [the company has] been reaching out, and ... [giving] the opportunity to other subcontractors, and unfortunately, they don't get the job because their proposals are not the best.... There's a lot of frustration with that, to where some just don't even fool with them anymore."

Some interviewees reported limited or no utilization of subcontractors in general. [Interviewees #: 1, 4, 8, 12, 13, 17, 22, 23, 24, 25, 35, 40, 46, TA #6, TA #8]. Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that when he works as a subcontractor, he does not in turn hire other subcontractors. However, he reported that he will hire subcontractors to do asphalt work if he is working on a project as the prime contractor.

Interviewee #12, the owner of a female-owned non-certified civil engineering and land surveying firm, said that the company rarely use second tier subcontractors, but when they do, it is for a project that requires a traffic engineer or traffic engineering study. He said that the company has a person that it uses for traffic studies, and they use that person because they know that individual. He said that the company does not subcontract to anyone else.

Interviewee #22, the Caucasian male owner of a non-certified aerial mapping firm, stated that most of his jobs are small and do not require the use of many subcontractors.

Interviewee #23, the African American male owner of a DBE/SDBE/MBE-certified security, construction, and food service firm, stated that as a subcontractor itself, his firm very rarely subs out any work.

Interviewee #24, the Caucasian male owner of a utilities construction firm, reported that "in our industry we don't sub out any work. We don't take jobs that we would need to sub out any work."

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that when the firm is hired as a subcontractor, the firm does not subcontract out work

because the firm is not allowed to subcontract, and the firm only bids on those projects in which the firm can complete the work and does not have to rely on other contractors.

Some interviewees reported positive experiences working with minority- and female-owned subcontracting firms. [Interviewees #: 3, 14, 15, 21, 26, 34, 39, 43, 44, 45, TA #1, TA #4, TA #5, TA #10]. Interviewee #3, the Caucasian male president of a civil engineering firm, said that some DBE firms do not have the experience that they need, but they are willing to learn, and his firm is working with some of these DBE firms through ODOT to assist them. He said that they have worked with one DBE firm for the past six months, and that is "going extremely well." He said that he has known the individual associated with the DBE firm even before they were certified as a DBE firm, and the individual has strong character. He reported working with another DBE firm, "and they are working out good so far;" he said that although the project is not yet finished, he knows that it will be a success.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, said that he tends to have to do more mentoring with the DBE subcontractors, and that he finds that the DBEs that he has tried to use are not as well-versed in compliance and administrative activities, such as paperwork issues, certified payrolls, etc. However, he said that this is not true of all DBEs, and some are extremely qualified. He noted that economic disadvantages have a reality associated with them, and there are gaps that he has had to fill for himself and for his subcontractors, and he supports filling those gaps.

Interviewee #15, the Caucasian male co-owner and manager of an engineering firm, said that he has worked with WBEs and MBEs. He said that this was a positive experience, adding, "I get along with everybody. That's why we're able to survive without advertising."

Interviewee #21, the Caucasian male general manager of a Caucasian male-owned bridge construction firm, said that the DBE subcontractors his company employs are businesses that they enjoy working with. He said that there are "maybe a few" DBE subcontractors that his company will not work with, but he could not recall anything specific.

Interviewee #26, a supervising manager of a Caucasian-owned construction firm, declared that his experience working with MBE/WBE/DBEs is limited to one supplier that he has worked with on several projects in the past. He further stated that the experience was always a positive one and that he would definitely work with this company again in the future.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm stated that MBE/WBE/DBE subs are "more caring and giving." He stated that the MBE/WBE/DBE subs understand working relationships "because they've been on the same road trying to get certified."

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that the firm has never had any problems working with MBE/WBE/DBE subcontractors. She added that even when she worked for another contractor for seven years, she cannot recall an incident with rejected work or failure to show up or anything else negative with an MBE/WBE/DBE subcontractor. She reported that recently the firm had a problem with a trucking firm that had issues complying with payroll reports, but that was the one and only time her firm had experienced a problem working with MBE/WBE/DBE firms.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that the firm has never had any problems working with MBE/WBE/DBE subcontractors.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that his experience working with MBE/WBE/DBE subs compared with non-MBE/WBE/DBE subs is that you get a better response when working with MBE/WBE/DBE contractors because they own the trucks and equipment and therefore are more conscientious of time and production versus someone who is just driving someone else's equipment.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, said that his members have had a "good" experience working with DBEs, and "there are a lot of great DBEs out there." He also said that he believes that many of his members are DBEs, but he noted that he does not identify his members by their DBE status.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, said "Even folks that don't have certifications, they agree that having that designation, the quality of the work and the quality of the process and the interaction is much better [from certified firms] ... they may not have been the best, but you find that with non-certified companies, there's some frustrations that they don't have their act together."

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that his clients report a positive experience working with MBE/WBE/DBE subcontractors. He stated that he did not have any reports from his clients of any negative experience working with DBE firms. He stated, "What I have experienced thus far has been positive."

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that her clients have reported experiencing a difference working with MBE/WBE/DBE subs compared to non-MBE/WBE/DBE subcontractors. She stated that one of her clients has had problem with majority firms completing the work, whereas MBE/WBE/DBE firms complete the work because they want to keep their reputations intact.

Other interviewees reported challenges working with or attempting to work with minority-and female-owned subcontracting firms. [Interviewees #: 3, 6, 7, 17]. Interviewee #3, the Caucasian male president of a civil engineering firm, said, "It is a small world and I know all of the DBE firms that are available." He said that he will verify a business's DBE status on ODOT's website, but he has worked with many DBE firms even before DBE participation was required on contracts. He stated that in the 1990s he worked with two DBE firms who did sub-par work; the DBE firms' work was not timely or of good quality. He said that within the last five years, there have been more qualified DBE firms. Interviewee #3 said, "ODOT has made really big efforts in the past year to utilize more DBE firms" and more than 75 percent of the jobs now require DBE participation. He said that "more recently ... all of the projects have had [DBE] goals on [them]." He said that their biggest challenge was convincing ODOT that it could trust the DBE firms that they were using and had worked with in the past, and trust their work. Interviewee #3 said that this may cost ODOT a little bit more because his firm is spending additional time managing the DBE firms but, "down the road," the DBE firms may be able to then act as prime contractors.

Interviewee #6, the African American owner of a DBE-certified trucking company, noted that some subcontractors "are very good, have very good equipment, are very good to [work] for. Others think just because they're DBEs ... they deserve this job, [but] their equipment is inadequate to work on anybody's job."

Interviewee #7, the Native American owner of a federally-certified aerospace firm, commented that his experience working with DBE subcontractors has differed depending on the ownership and operation of the DBE. He noted that some subcontractors that have the potential to be certified are not because they are "not educated" and "haven't received enough information to understand [that] the certification alone is not enough ... that being an 8(a) by itself is not enough without being able to meet certain capabilities and performance."

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that his experience utilizing DBE subcontractors "would depend on the DBE." He stated that "for the most part it is okay." He reported that he has had some negative experiences working with DBE subcontractors related to their performance and their failure to do the work. He stated that he had this experience on an ODOT project "a couple of years ago."

Some reported that there was no difference in working with minority- and female-owned subcontracting firms and majority firms. [Interviewees #: 1, 2, 4, 9, 11, 15, 20, 26, 35, 36, 37, 38, 40, 42, 47]. Interviewee #1, the Caucasian male chief financial officer of a Caucasian male-owned heavy highway and bridge construction firm, said that his firm has experienced no difference in its work experience with DBE and non-DBE subcontractors.

Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, said that there is no real difference between DBE and non-DBE subcontractors; "they are both competent." He said, "I don't really draw the line too much there, but I try to focus on DBEs that satisfy [my] goals of helping the people that really need the help." He said that there are contractors that have \$100 million in contracts and DBEs who "do not have a dollar's worth of work. There is work out there." Interviewee #2 said that he went to a meeting the previous week at ODOT and ODOT reported that it awarded \$1.4 billion in contracts in the prior year; Interviewee #2 questioned why he has not received any work, adding, "I did not get one dollar of that money."

Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that in his experience it was the same working with a DBE subcontractor versus a non-DBE because the quality of work was the same.

Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, said that subcontractors are generally the same, and everyone just needs a job.

Interviewee #15, the Caucasian male co-owner and manager of an engineering firm, noted that he "didn't realize there was a certification process ... until just recently, but I can't think of anything that I would discern the difference between [certified and non-certified companies]."

Interviewee #36, a Caucasian female senior engineer of an engineering firm stated that her experience working with MBE/WBE/DBE subs compared with non-MBE/WBE/DBE's has been good and she does not see a difference.

Interviewee #37, the African American male owner of a DBE-certified engineering firm, stated that there is no difference working with MBE/WBE/DBE subs compared with non-MBE/WBE/DBE subs. He said, "The DBE status doesn't make a lot of difference." He stated that his experience has been that you get better quality work and more realistic work, goals, and prices from people that are in business and understand business than you get from people that are just starting out in business. He stated, "I think someone who starts out and immediately goes into the DBE pool has unrealistic expectations about the amount of work they are going to get, what they are going to get paid for the amount of work they get, the benefits of being a DBE, [and] the amount of money they can spend. I think a lot of people have unrealistic expectations about being in business, in particular in the private sector. "

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, reported that that the firm has met a few MBE/WBE/DBE subcontractors that did not perform satisfactorily, but, overall, DBE firms perform satisfactorily 80 percent of the time, which is the same proportion for non-DBE firms.

C. Subcontractor / minority- and female-owned businesses' perception of utilization in the public and private sectors.

Interviewees who act as subcontractors reported a number of different ways in which they secure work with prime contractors. [Interviewees #: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 17, 18, 20, 21, 22, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 47, 48, TA #1, TA #2, TA #3, TA #4, TA #5, TA #6, TA #7, TA #8, TA #9, TA #10]. Interviewee #1, the Caucasian male chief financial officer of a Caucasian male-owned heavy highway and bridge construction firm, stated that when his firm works as a subcontractor, they will contact the project managers on various jobs. He stated that this process does not differ between the public and private sectors, and noted that his firm completes only 10 percent of their work in the private sector. He said that his firm will pull the plan holders' lists to identify who has pulled the plans for a given project; they do not market their firm to prime contractors. Interviewee #1 reported that ODOT publishes a tentative list of projects that assists his firm in identifying work opportunities.

Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, stated that he obtains work as a subcontractor through the relationships that his firm has established over the past 70 years. He said, "I always start and complete a project, and I always complete it before deadline." He also said that he only markets his firm to prime contractors "at the state highway level with [ODOT]." He said that he provides brochures about his business and a list of references with telephone numbers. He added that he focuses on projects with the highway department and will review the line items and determine what he is good at. He said that sometimes there are 10 contractors bidding on the same project, so he has to contact and submit a bid to all 10 of them; he said that he does not "pick and choose."

Interviewee #3, the Caucasian male president of a civil engineering firm, said that with respect to marketing his firm, "we have to market ourselves to [prime contractors], make contact with them, make sure they are aware of our services, references, and word of mouth — a lot of times they contact us because they have heard that we do a good job." He said that they mostly have long-term relationships and expect the same thing from their subcontractors.

Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that he works with two other companies — one prime contractor and one other subcontractor — and they try to bid projects as a team. He stated that he has not yet utilized this process for projects with DBE goals. He said that he does not generally market his firm to prime contractors, but rather reviews a list of jobs and determines which ones he would like to bid on. He also stated that many prime contractors call him directly, as he has worked over the years with many companies that already know him. He stated that this process is working for his company.

Interviewee #5, the Caucasian male co-owner of a geotechnical engineering firm, noted that he gets on projects as a subcontractor through referrals, and this does not differ between the public and private sectors or on projects with or without goals. Interviewee #5 reported that he does not market his firm to primes "very much," and he works through referrals. He said that if he did market his firm, he would do that "face-to-face." He noted that he generally does not contact anyone. He added that state law prohibits him from submitting a bid for geotechnical engineering services, so he is supposed to be selected first based on his qualifications and then negotiate a price.

Interviewee #6, the African American owner of a DBE-certified trucking company, reported that he gets work as a subcontractor by bidding on projects. He said that he learns about projects "through ODOT," which provides a list of jobs available at that time, and through prime contractors who request bids. He noted that this process does not change between the public and private sectors. He said that he markets his firm to prime contractors through "referrals, work ethic, and then just the relationship that we have with one another." He said that he markets his firm to both new primes and those with whom he has established relationships. He added, "There are contractors here that are well known that I just haven't had the opportunity to work with yet" because he got outbid, but he said that he talks with them on a daily basis. He related that contractors will send him forms to let him know their needs on a particular job and also to request a bid.

Interviewee #7, the Native American owner of a federally-certified aerospace firm, stated that his company gets work as a subcontractor through relationships and past performance. He added that the company usually has "respond[ed] to requests for proposals." He noted that this process does not differ between the public and private sectors or between projects with and without goals. He said that he markets his firm to primes through "direct contact, face-to-face meetings, information, conferences, networking events, [and] consistent follow-up."

Interviewee #8, the African American president and owner of a civil and structural engineering firm, said that when he works as a subcontractor, he is working for people with whom he has a long-term relationship and that they call him directly. He said that this does not vary across the public and private sectors.

Interviewee #9, the African American owner of a non-certified trucking company, said that he works in both the public and private sectors. He said that the process that he uses to find work in these sectors is different. He said that to find private work, he uses word of mouth, calling people he knows. He said that with government work, he has to "get out there and find somebody that already [has] that government contract, and then they'll let you work with them." He added that he has not yet had a contract directly with a government entity.

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, reported that the company gets on projects by responding to requests for bids and

researching what is available and submitting proposals. He said that the company has three types of clients. He said that commercial construction "is always going to be price-driven, so on those, we usually have to put together a bid package, and whether we get it or not is entirely price-driven." He said that the public sector work is based on "qualifications, price, and relationship. If your price is too high, they may go to somebody else just because it's too high ... If they don't think you're qualified, you don't even get a chance to propose, and if you can't establish a relationship, you don't get the chance to propose.... On the design-build work, they want someone on their team that they trust to give them the correct answers and keep them out of trouble." He said that the company has had its best luck when it has been recommended. He also noted that they are very fast about preparing and delivering proposals when requested. He commented that the company markets itself to primes by putting together proposals on specific projects, marketing packages, and scheduling face-to-face meetings. He said that they also provide a newsletter twice a year. He added that the firm learns about projects by subscribing to a construction news service for their commercial work, visiting the FBO government site, and receiving phone calls from people who ask what is coming up in terms of work. He said that the firm also sometimes gets work as a result of a direct invitation.

Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, reported that the company gets work in the private sector though word of mouth and personal recommendations. He added that the company works almost exclusively for one contractor in the public sector. He said that the company markets itself to primes through the website, and sometimes the company submits specialized job proposals. He noted that each job has its own specifications as to how the job is bid out.

Interviewee #12, the owner of a female-owned non-certified civil engineering and land surveying firm, reported that the company obtains jobs as a subcontractor by reference, primarily when architects come to the firm and ask for civil engineering service. He reported that this occurs in both the public and private sectors. Interviewee #12 said that the company does not actively market to prime contractors, but they are in the process of starting to market this way because business has decreased so much. He added, "Before we had as much business as we could handle just come in the door."

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, reported that he gets on projects as a subcontractor because "firms ... know of me, and they give me a call." He said that he does not market to prime contractors through any means other than word of mouth. He noted that the process differs in the public and private sectors. He said that in the public sector he is the sub if he gets the project, but in the private sector, "usually the prime has already acquired the project ... We just have to ... negotiate the fees and everything."

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, reported that he gets on projects as a subcontractor by bidding and being the low bidder. He said that, so far, he has not spent a lot of time working to market his company to primes because he prefers to be the prime. He said that he has also spent the last few years working almost exclusively for the Department of Defense as an 8(a) and did not have time to pursue other marketing strategies. However, he noted that now that his 8(a) certification is over, he is starting to look at other jobs and he is reevaluating his marketing strategies.

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, said that when he does work as a subcontractor, he is usually working on architectural projects that "need engineers for the civil work." He also commented that he gets these jobs through people who come to him directly, not by responding to RFPs.

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, reported that his firm will work as a subcontractor approximately 20 percent of the time. He stated that a prime contractor will generally contact them to submit a bid, or he may send out a price quote if he identifies a project on which he is interested in working. He stated that he does not market his firm at all, including to prime contractors. He said that he also knows a lot of prime contractors by reputation — especially with respect to their payment practices — and he may submit a price quote to those prime contractors for a specific project.

Interviewee #18, the Caucasian male treasurer of a Caucasian male-owned heavy paving and grading construction firm, said that in order to get work as a subcontractor, his company checks lists of projects and then submits a quote directly to the prime contractors. He added that they find the prime contractors by requesting a list of plan holders. Interviewee # 18 said that there is no reason to market his business because he is usually already familiar with prime contractors.

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, said that his company gets jobs as a subcontractor through bidding, and the difference between private and public sector work is that the private sector work is obtained by "knocking on doors." He said his company engages in limited marketing to prime contractors by attending networking events and lunches. He said that he identifies prime contractors by who is getting bids.

Interviewee #21, the Caucasian male general manager of a Caucasian male-owned bridge construction firm, said that when his firm participates on jobs as a subcontractor, it finds out about work through "word of mouth."

Interviewee #22, the Caucasian male owner of a non-certified aerial mapping firm, stated that he has worked as the subcontractor "on several jobs with [a surveying firm] on work for ODOT." He stated he got connected with them "by meeting them at a surveyor's convention after first meeting them at ODOT."

Interviewee #24, the Caucasian male owner of a utilities construction firm, stated that his work as a subcontractor comes from "people seeking us out, or maybe [the firm] they are dealing with knows us." He further stated that his firm does not seek out subcontractor work.

Interviewee #25, the Hispanic male owner of a DBE-certified construction firm, said that most of his work comes from prior relationships with companies that seek him out. He said that occasionally he hears about jobs from steel suppliers, but "mostly primes call him to bid on their projects." He stated that he does little direct marketing to primes other than to maintain current relationships and network when he has the opportunity.

Interviewee #26, a supervising manager of a Caucasian-owned construction firm, stated that getting sub projects is usually achieved through prior relationships and networking. He further stated that many primes in his industry do not perform storm and sewer work, which his firm is well-equipped

and experienced to handle. He stated, "This gives us a competitive edge against similar firms." He noted that his firm does not directly market to primes.

Interviewee #27, the Caucasian female owner of a DBE-certified erosion control firm, stated that prime contractors working for ODOT seek her firm out for jobs, so the projects actually come to her.

Interviewee #28, the Native American female president of a trucking and excavating firm, stated that the firm subscribes to www.bidclerk.com, which e-mails solicitations to them. She said the firm also frequently receives faxed invitations to bid from various contractors including some from out of state. She stated that the firm submits bids on projects the firm is interested in based on the solicitations and faxed invitations received. She stated that the firm markets to prime contractors by word of mouth. She stated that if there is a project they are interested in, www.bidclerk.com sometimes provides a list of plan holders, so the firm will contact the plan holders to submit a bid; she reported this has been successful for the firm.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that he gets on projects as a subcontractor in the public and private sector by calling companies with whom he is familiar. He stated that since becoming certified with the City of Tulsa, he has been heavily solicited through e-mails and faxes, but he has not responded to any solicitation because he does not know how to prepare bids, and he has not been able to get any bid assistance. Interviewee #29 stated that not knowing the bid process and how to prepare bids has prohibited him from bidding not only on City of Tulsa projects but also on ODOT projects, because he is not familiar with the bid process or ODOT's web site. He said that marketing has been a big stumbling block for his firm. He stated that in the past he tried to market his firm to local prime contractors, but never got any work as a result. Interviewee #29 reported that he did not continue the marketing effort because he did not want to keep incurring the additional expenses. He stated that he markets the firm when business is down by driving up on work sites and talking to the dirt contractor. He stated that he was aware that his marketing is not as effective as it should be. He said he only finds out about projects through other drivers, the news, or word of mouth.

Interviewee #30, the Caucasian male co-owner of a transportation firm, stated that the firm does not do any marketing other than talking with primes through existing relationships and word of mouth. Interviewee #30 stated that he does not spend any money on marketing and feels that his method of marketing by word of mouth is successful for him. Interviewee #30 reported that he searches websites to find out about job opportunities and that he receives referrals from people he has worked for in the past.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated that the firm has sales representatives that help them obtain work and utilize websites such as www.Bidnews.com for projects. Interviewee #31 stated that most of the contracting opportunities come from solicitation directly from prime contractors for whom they have worked for years. She reported that the way the firm finds out about subcontracting opportunities does not differ for private sector projects and public sector projects. Interviewee #31 reported that the firm sometimes markets to prime contractors. She stated that because the firm is familiar with the local market and the industry, they are aware of upcoming projects and make contact with potential bidders through phone calls to offer bids on particular projects. She stated

that the firm is well-known in Northeastern Oklahoma, and sometimes the firm receives invitations from other companies for bids.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that the firm gets on projects as a subcontractor by submitting bids to the identified plan holders on projects. She stated that the firm does not do any marketing and does not market itself to any primes. She reported that they identify prime contractors by obtaining the list of plan holders. She stated that the firm has established working relationships with the majority of the primes in their sector of work. She stated that securing work is based on which company's bid is the most competitive.

Interviewee #33, the Caucasian male president of an engineering firm, stated that he gets on projects as a subcontractor when other firms contact him and solicit his participation. Interviewee #33 reported that the way he gets on projects as a subcontractor does not differ for projects in the public and private sector or projects with MBE/WBE/DBE goals and non-MBE/WBE/DBE goals. He said that he markets his firm by word of mouth and occasionally sends out mailings to other architectural and engineering firms. Interviewee #33 reported that he finds out about specific projects from e-mails that he receives from ODOT and letters sent out by the City of Tulsa. He stated that this method seems productive because he has submitted his credentials and been awarded contracts from both agencies in the past.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm stated that he gets on projects as a subcontractor by visiting the ODOT website and viewing job opportunities. He stated that private sector prime contractors contact his firm because of his reputation in the industry. In addition, he stated that his firm also works closely with a bridge and road prime contractor who contacts him regularly to ensure that his firm maintains a healthy workload. He stated that he obtains subcontracting projects differently in the private sector because everyone is attempting to bid and get on projects. He stated that with public sector jobs, particularly with ODOT, prequalification is required and you have to be a certified prime contractor to bid on projects. He stated that he gets on MBE/WBE/DBE goal projects versus nongoal projects in the same manner, by visiting the appropriate web sites and viewing work opportunities. He stated that the firm does not do cold-calling or direct marketing. Interviewee #34 stated that he searches the ODOT website, Bid News, Bid Clerk and relies on word of mouth to find out about specific jobs.

Interviewee #35, the Native American female president of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated that the firm does not market to prime contractors. She stated that the firm gets on projects and finds out about contracts through 27, www.bidnews.com, and ODOT's website, solicitations received from other companies, and newspapers. She stated that the firm finds out about private work through word of mouth and direct solicitations to the firm from owners. She stated that the firm finds out about DBE goal projects through word of mouth. She reported that the firm has an ad in the AGC magazine, has a website, and has a good reputation in the industry.

Interviewee #36, a Caucasian female senior engineer of an engineering firm, stated that the firm works as a subcontractor when other firms solicit their services because a particular project may require a unique skill set that her firm offers. She stated that there are a number of local firms that offer general engineering services but when they run into unique projects or unique services are

required, typically her firm can meet those need and provide those unique services. She stated that firms solicit her firm because it has a unique skill set and it does not differ with MBE/WBE/DBE goal projects versus non-goal projects. She stated that typically the firm does not market to primes unless they know that a particular prime is pursuing a specific project and her firm wants to be part of the project. She stated that the firm finds out about specific jobs through interaction with their clients. She stated that the firm does search for bids and solicitations through posting but "by the time those projects come out a lot of decisions about teaming and such have already been made. You have to get your ducks in a row a long time before the public announcement is made. We work on positioning ourselves a year, two or three years in advance." She stated that typically if the firm has not been aware of and pursuing a particular project for a year or more the firm will not bid on that project.

Interviewee #37, the African American male owner of a DBE-certified engineering firm, stated that that he gets on projects as a subcontractor because other firms need a DBE and they know he works in a particular area. He stated that he has long-standing relationships with companies that contact his firm when they need assistance. He commented that he also gets on projects as a subcontractor because there are also some companies that do not have electrical engineers, and when a project requires electrical work and has a DBE goal, those companies also contact his firm. He noted that two-thirds of the time the prime contacts him and he makes contact will the prime on one-third of the projects. He stated that the only marketing he does is to occasionally attend functions sponsored by primes or professional groups or make telephone calls to solicit work from prime contractors he has worked for in the past.

Interviewee #38, the Native American female president of an engineering firm, stated that they market themselves to primes by attending community events but have not had great success. She stated that oftentimes, "small business has a stigma that says we can't do the job."

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that the firm frequently reviews opportunities using the DODGE Reports, has a subscription to www.bidnews.com and many times the firm is solicited by contract managers and engineers to get on projects as a subcontractor. She reported that the firm also reviews lettings for ODOT projects. The process of finding out about subcontracting opportunities does not change for private and public sector work or for MBE/WBE/DBE goal projects versus non-goal projects.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that the firm receives all of the ODOT publications and solicitations by e-mail, and the firm stays busy and does not have a need to market to any primes. He stated that the firms get on projects as a subcontractor by responding to solicitations and invitations to bid received from prime contractors. He noted that the as a professional services firm, the firm does not submit bids but submits qualifications and letters of interest in hopes of making the short list for interviews on particular projects with ODOT.

Interviewee #41, the Hispanic male owner of a DBE-certified trucking firm, stated that the firm often works for another DBE trucking firm that is owned by a family member. He reported that prime contractors usually contact the firm to solicit bids on projects and that the firm gets on projects as a subcontractor by responding to these invitations to bid and by taking on overflow

work from other trucking companies. He noted that he receives bid invitations and work opportunity information primarily from three prime contractors. He said that he sometimes contacts other local contractors to try to get on their lists of potential subcontractors to receive bid information. He added that the firm markets occasionally by contacting local asphalt companies to see if they need any hauling, and this occasionally results in small projects.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, reported that other companies contact the firm for bids or quotes as a subcontractor on projects in both the public and private sector. She said that often, when the firm bids as a prime and is not the successful bidder, the successful bidder will contact the firm and solicit bids or quotes for portions of the project. She stated that because the firm is a DBE, primes often contact the firm to meet DBE goals. Interviewee #42 said that the firm markets to primes based on the particulars of each project. She said that if the firm wants to do the entire project, the firm will bid as the prime, and if there are portions of the project that the firm desires to complete, the firm will contact those firms on the plan holders list with whom the firm is familiar to submit a bid. She noted that experience has taught the firm to be very selective about to whom the firm will submit a bid because there are select primes they will not work with. She said that if the firm receives a request for a bid from an unfamiliar company, the firm will research the company to try to find out some background information on the firm before submitting a bid.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that the firm gets on projects as a subcontractor when prime contractors and owners call or contact the firm directly. He stated that the firm gets on projects in the same manner for public sector and private sector work.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that the firm gets on jobs by bidding with the prime contractors and owners, and calling or contacting them by fax. They stated that the way the firm gets on projects does differ between public sector and private sector work. Interviewee #44 stated that there are additional costs involved with submitting bids and securing projects on public sector projects.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that the firm usually gets on projects as a subcontractor by word of mouth. He stated that he has marketing signs in the area and distributes business cards all the time so people in the private sector contact the firm with work opportunities. He stated that the firm does not get subcontracting work on MBE/WBE/DBE goal projects.

Interviewee #47, the Caucasian female president of a WBE-certified trucking company, stated that she gets on specific projects by getting a bid sheet in the mail or by fax. She stated that contractors contact the firm when they need trucking. She stated that she sometimes markets by calling the general contractors or prime contractors and asking for work. She stated that she used to subscribe to an industry magazine that published listings of job opportunities that were coming up for bid and if there was a project on the list that she was interested in, she would contact the primes and submit a bid.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that the firm identifies specific projects for subcontracting opportunities by reviewing the monthly ODOT letting and contacting those primes he has worked with over the years whom he anticipates

will be bidding on the upcoming projects. Interviewee #48 reported that he does not receive e-mail notifications from ODOT but does have prime contractors who contact the firm for bids and quotes based on the monthly letting and job opportunities. Interviewee #48 stated that he identifies projects and gets work by introducing himself to those prime contractors who are on the list of plan holders from the ODOT website. He reported that he gets a copy of the plan holders list and sends quotes to every plan holder on projects that he is interested in.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, said that his subcontractor members obtain work with prime contractors by reviewing the plan holders' lists and contract specifications and then submitting their prices to the prime contractors. He said that he believes that his DBE subcontractor members would submit their prices on any project, regardless of whether there is a DBE requirement; however, he said that he believes that all of the public sector work has a DBE requirement. He said that the only advertising that his members do that he is aware of is "personal networking through this association. We make sure that we host about 18-20 different membership events [on an annual basis]." He said that these are all networking opportunities for his members and he "believe[s] it has been very successful."

Interviewee TA #2, the executive director of a Hispanic trade association, reported that the organization's members get on projects with primes by hiring sales people that market their business to primes. He also noted that many companies utilize the Internet to market themselves. He said that they also attend networking events and seminars to connect with primes.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that his clients usually get work from relationships they have established or from bids solicited by primes. He noted that he did not think that this differed between the public and private sectors. He reported that most of his clients will market themselves to primes by providing a sampling of their qualifications, through flyers or other promotional materials. He said that the bank's clients identify primes by looking on the State's bid list. He noted, "It's repetitive." He added that the bank's clients find out about particular jobs from ODOT, which advertises the projects well in advance. He noted, "Everybody has an opportunity to look at those."

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, reported that the organization's members get on projects by competing with others and submitting RFPs. He said that sometimes the members are picked because of past performance and/or relationships, but members usually get work through the competitive process. He commented that the organization's members really do not market themselves to prime contractors, and the organization has noted this as a "major problem." He reported that the organization has been working with the Oklahoma Contractors Association to try to change that in order to find creative ways to expose and market the members to primes. He stated that this is "one of the underlying factors why the ... work doesn't occur, especially on the private side." He reported that the organization's members who have attended annual contractor meetings, taken the time to network and gathered information about the companies in the marketplace have actually seen some returns on that investment. He said that there is a perception among many of their members that these efforts do not do much good. He said, "No, you may not get a contract this

year, but it could plant a seed for next year.... They're wanting a short-term gain instead of making a long-term investment."

Interviewee TA #5, an organization providing outreach to Native American and other minorityowned businesses, stated that there are some DBE databases that exist, in particular within ODOT, which seemingly do a good job of putting out information for upcoming bids for primes searching for DBE firms. Interviewee TA #5 stated that his clients get information on projects as subcontractors from relationships with primes, general contractors, other subcontractors, architects, trade associations, and groups, which does not differ for public and private sector jobs nor does it differ for DBE goal project and non-DBE goal projects. Interviewee TA #5 stated that some of his clients market their firms to primes, but as a whole, his clients' marketing has limited effectiveness because his clients do not have experience marketing themselves. He stated that his agency tries to encourage companies to create capability statements, make sure that their information in CCR is complete and is as accurate as possible, and try to help his clients understand what contractors are looking for and their expectations. He stated that he was aware that ODOT has a DBE conference annually, which is a great place for primes and subcontractors to come together. He added that other marketing opportunities would be the Association of General Contractors, trade meetings, trade associations, and SBA matchmaking opportunities in conjunction with its annual conferences. He stated that marketing is about solving problems and, while there has been some good work in that area, the efforts need to be ongoing.

Interviewee TA #6, the president of a minority business development agency, stated that his clients get on projects as subcontractors principally through notification received from his agency. He stated that the agency receives bid solicitations from various outlets and in turn redistributes those solicitations to its client base. Interviewee TA #6 stated that the method by which his clients get on projects does not differ for private and public sector work. Interviewee TA #6 reported that his clients' efforts to get on projects as subcontractors do not change for projects that have MBE/WBE/DBE goals or those that do not have MBE/WBE/DBE goals. He said, "The problem is [that my clients] don't know of projects that have DBE goals." He noted that "they think of it in a general sense; that it's an opportunity for work, rather than there being a DBE participation goal." Interviewee TA #6 stated that his clients were not aware of MBE/WBE/DBE goals. He added, "What they are most aware of is the elimination of affirmative action in procurement. Here in this city there is no such thing as affirmative action or minority set-asides. The mindset is saying, 'Affirmative action no long[er] exist[s], so I have to compete with everybody else."

Interviewee TA #6 reported that his clients do not market their firms effectively to prime contractors. He stated that, "again, this is based on capacity. A lot of my clients live hand-to-mouth every day, so they are more concerned about the job in front of them, getting it done, and getting a check so they can pay the rent or mortgage, put food on their table, and buy clothes for their kids." Interviewee TA #6 stated that his clients do not market because they do not know of the resources to do that. He stated that his clients identify primes through word of mouth, and if there is a prime contractor who has local visibility, name recognition or brand in the community, some of them might pursue an opportunity with the prime, but it has not been successful. Interviewee TA #6 indicated that his clients learn about a particular job through public advertisement. He stated, "There is a lot of development going on in Tulsa. Most of it is being done with public money. It receives a lot of visibility in the paper or media, and clients see that and make a decision: 'do I waste

my time trying to get a job there, or do I spend my time going after jobs that I know I have a reasonable chance of getting?"

Interviewee TA #6 reported a client's success story wherein recently, a man who is a steel fabricator and who always had aspiration of starting his own business called and inquired about how to bid for work on the new ballpark that is being built. He stated that the local contractor made a commitment to include minorities in building the ballpark, which is located in an historically black district. Interviewee TA #6 stated that the prime contractor set a goal for themselves of 20 percent overall minority participation. He stated that the ball park is almost done, and they are at 21 percent minority participation. Interviewee TA #6 stated, "I sent this gentleman to the contractor who hired him. So every hand rail in the ball park is fabricated by this business owner."

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that her clients obtain work by listing their information on the ODOT website which supplies the contact information of MBE/DBEs to prime contractors. She stated that she encourages her clients to introduce themselves via e-mail or in person, but it is unclear whether they always do this. She indicated that the process is not different for the private sector and that it does not make a difference for projects with goals versus non-goal projects. She added that her clients try to market their companies to prime contractors through e-mail or maintaining a website, but many do not have the time or money to invest in real networking or attending events. She said her clients identify prime contractors through the ODOT website and characterized their efforts as "not successful at all." She said that her clients can learn of specific projects through word of mouth, through the website, or occasionally a contractor will call them.

Interviewee TA #8, a program coordinator and a special program consultant for a minority trucking cooperative, stated that members of the cooperative get on projects as subcontractors principally through bidding to general contractors and ODOT prime contractors. They stated that members of the cooperative get on projects by submitting bids to prime contractors, making cold calls to companies that they know have pending projects, and going to job sites to offer their services. They stated that the method by which members of the cooperative get on projects does not differ for private and public sector work.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that his clients get on projects as subcontractors principally through notification received from his agency and others. He stated that the agency receives bid solicitations from various outlets and in turn redistributes those solicitations to his client base. He stated that DBE firms are getting jobs based on their previous connections and experience working with primes rather than on the firm's DBE status or certification.

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that her clients report that they get on projects as subcontractors in the private sector by learning through word of mouth of a company that needs their particular service and then they solicit the company for work. She stated that for the public sector, her clients report that they peruse the various government websites such as www.fedbizops.gov to view contracts and identify the main contractors to solicit work. She stated that this process does not differ for MBE/WBE/DBE goal projects versus non-goal projects.

Some interviewees reported having worked with a DBE prime contractor. [Interviewees #: 7, 18, 30, 33, 38, 40, 42, 47, TA #2, TA #9]. Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that he is currently working with a certified prime contractor. He said that he has teamed with that prime to try to win a contract. He said that the process has been positive, though his company has "had to help [the prime] some," but he noted that the project is very large. He added that he is considering establishing a mentor-protégé relationship in which his company would be the mentor to the prime.

Interviewee #18, the Caucasian male treasurer of a Caucasian male-owned heavy paving and grading construction firm, stated he had only worked with one DBE prime several years ago, but they grew so much they lost certification.

Interviewee #30, the Caucasian male co-owner of a transportation firm, stated that he has had experience working with a DBE prime and did not see any difference working for DBE primes and non-DBE primes.

Interviewee #38, the Native American female president of an engineering firm, stated that the majority of the primes the company works with are MBE/WBE/DBEs and the experience has been good.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that a WBE engineering firm contacted them and solicited a price quote for a project. He reported that his firm has been working with this same WBE prime contractor on several projects and rarely submits price quotes to other prime contractors for fear of being stretched too thin.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated there was no difference working with an MBE/WBE/DBE and non-MBE/WBE/DBE prime.

Interviewee #47, the Caucasian female president of a WBE-certified trucking company, stated that she has worked for a DBE prime contractor before with no problems and she did not experience any difference working for a DBE prime contractor.

Interviewee TA #2, the executive director of a Hispanic trade association, said that he may know of a couple DBE primes working in the industry, and he thought that a couple of his members had probably worked with these primes.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that with the OMSDC more MBE firms are serving as prime contractors.

Other interviewees reported having limited to no experience working with a DBE prime contractor. [Interviewees #: 1, 2, 3, 4, 5, 6, 9, 11, 12, 13, 14, 16, 17, 20, 21, 24, 27, 28, 29, 32, 34, 35, 36, 37, 39, 41, 43, 44, 45, 46, 48, TA #1, TA #3, TA #6, TA #8, TA #10]. Interviewee #3, the Caucasian male president of a civil engineering firm, said that he was not aware of any DBE prime contractors.

Interviewee #5, the Caucasian male co-owner of a geotechnical engineering firm, reported that he has not knowingly worked with a DBE prime contractor.

Interviewee #9, the African American owner of a non-certified trucking company, said that he does not think that he has done work for a DBE prime yet, but he is trying to get work with one.

Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, noted that he has not worked with any DBE primes and added that most of the people with whom he works are non-DBE firms.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, said that he has not worked with a DBE prime, but he has worked with an 8(a) prime. He noted that he has experienced both subcontracting for DBEs and subcontracting to DBEs. He said that DBEs are generally no different from non-DBEs and that all of his negative experience has been with non-DBEs firms.

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, reported that he does not recall ever having worked with a DBE prime contractor.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that the firm has not had any experience working with MBE/WBE/DBE prime contractors and does not believe that there are any in the sector in which they work.

Interviewee #35, the Native American female president of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated that the firm has never worked with any DBE prime contractors that they were aware of because the firm does not inquire about a prime's DBE status.

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that the firm has never worked with an MBE/WBE/DBE prime contractor. She reported that the firm has worked with several engineering firms that were Native American-owned, but the experience was not any different compared to working with a non-MBE/WBE/DBE firm.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, reported that he was not aware of any DBE primes working in the area.

Interviewee TA #6, the president of a minority business development agency, stated that he is not aware of clients that have experience working for DBE prime contractors.

Some interviewees reported that there is no difference in the process for acquiring projects with MBE/WBE/DBE goals and projects without goals. [Interviewees #: 5, 7, 11, 13, 33, 34, 39, TA #3, TA #5, TA #6, TA #7]. Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that he did not think that the way contractors acquired work differed between the public and private sectors. He added that there is "no enforcement" of DBE goals, so the process does not differ between projects with and without goals.

Some interviewees reported that there is a difference in the process for acquiring projects with MBE/WBE/DBE goals and projects without goals. [Interviewees #: 25, 43]. Interviewee #25, the Hispanic male owner of a DBE-certified construction firm, reported that getting on jobs that include DBE goals is sometimes easier, "but we still get the work because of our track record, not just because of the goal."

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that the firm gets on projects in the same manner for DBE goal projects and non-DBE goal projects. However, Interviewee #43 stated, "If there is no DBE goal on that project, the average prime won't even consider you because he doesn't need you [to satisfy a goal]."

Some interviewees reported that the same prime contractors solicit them for work in both the public and private sectors. [Interviewees #: 1, 2, 5, 6, 7, 9, 11, 16, 20, 21, 25, 28, 30, 31, 33, 35, 38, 39, 42, 44, 47, TA #2, TA #7]. Interviewee #1, the Caucasian male chief financial officer of a Caucasian male-owned heavy highway and bridge construction firm, reported that the same prime contractors will use them in both the public and private sectors if they do that type of work; he noted that public and private sector work can be very different.

Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, said that the prime contractors with whom he works "absolutely" utilize his firm in both the public and private sectors. He said, "I almost don't even bid projects anymore [with the prime contractors that I works with all the time]," but rather he just negotiates the price because they are so comfortable with one another.

Interviewee #6, the African American owner of a DBE-certified trucking company, mentioned that the same primes use his firm in both the public and private sectors because "[t]hey are impressed with our quality of work."

Interviewee #7, the Native American owner of a federally-certified aerospace firm, reported that the same primes use his company in both the public and private sectors "to the extent" that his firm can provide the capabilities needed. He noted that his company has structured its competencies so that they cross industry lines, and "[n]ot all DBEs have done that."

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, said that prime contractors that use him in the public sector also use him on private sector work. He said that this is due to the company's "capability to provide services."

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, said that the prime contractors that use his firm on public sector work also use his company on private sector work because of "an established relationship."

Interviewee #25, the Hispanic male owner of a DBE-certified construction firm, reported that he has done work for the same primes on both public and private work.

Interviewee #28, the Native American female president of a trucking and excavating firm, stated that the prime contractors that use the firm for public sector work also use them for private sector work because her husband, who does the bidding, is honest, upfront and firms trust him to deliver the work promised.

Interviewee #33, the Caucasian male president of an engineering firm, stated that primes that use his firm on public sector work also utilize the firm on private sector projects because of his proven performance and past relationships.

Interviewee #35, the Native American female president of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated that the primes that use the firm on public sector work also utilize the firm on private sector projects, but on a limited basis based on the nature of the work the firm provides.

Interviewee #38, the Native American female president of an engineering firm, stated that all of the primes that the firm works with uses them for public and private sector projects, except for one of the largest construction firms in Oklahoma, which only uses the firm to meet DBE goals and would not use the firm in the private sector or for non-DBE goal projects.

Interviewee TA #2, the executive director of a Hispanic trade association, said that he would assume that primes use the organization's members as subcontractors in both the public and private sectors.

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that her clients have not worked directly with prime contractors at all. She said that they typically work as W-9 subcontractors to another subcontractor. Interviewee TA #7 stated that the same subcontractors that hire her clients on public jobs also hire her clients on private jobs, but she reiterated that these are subcontractors acting as primes and the work is isolated and the profit margins lower.

Other interviewees reported that the same prime contractors do not solicit them for work in both the public and private sectors. [Interviewees #: 4, 10, 12, 13, 14, 29, 34, 37, 43, 45, 48, TA #6, TA #10]. Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, reported that he generally works on projects as part of a team composed of his firm and two other companies. He stated that the prime contractors that utilize his firm on an ODOT project do not also utilize his firm in the private sector, because the prime contractor has its own non-DBE subcontractors; he reported that these prime contractors need to hire his firm for ODOT projects because their subcontractors are not DBE-certified.

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, reported that primes who use them in one sector usually do not use them in the other sector. He noted that the company only sees crossover in work building for municipalities in the schools because the people who build the roads are often also involved in building the buildings. He noted that the lack of crossover often stems from the size and experience of the firm as well as the project budget.

Interviewee #12, the owner of a female-owned non-certified civil engineering and land surveying firm, said that there is very little overlap between public sector work and private sector work because the company's public sector work comes directly from cities. However, he said that the company does perform some public work for architects.

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, reported that the same primes do not use him in both the public and private sectors. He said that he thinks that "in the private sector, a lot of those guys really don't offer

structural engineering, so they would probably tend ... to direct their clients just to contact me directly."

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, said that the primes that use him in public sector work do not generally use his firm in private sector work because primes that work in government contracting tend to specialize in government work, and primes that do private work tend not to do government work.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, reported that the prime contractors he works with mainly work on public sector jobs and currently have not used him on any private sector projects.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned excavating firm, stated that the primes that use his firm do not do private sector work and therefore use the firm for public sector jobs only.

Interviewee #37, the African American male owner of a DBE-certified engineering firm, stated that some primes who have used his firm on public sector projects have never used his firm on a private sector project. He stated that those primes that use his firm on public sector work do not use him on private work because many of his clients separate their public and private sector work internally and they may not be aware of his firm for private sector projects.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that the primes that use the firm on public sector projects are not the same prime contractors that they work for on private sector projects.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that primes that use the firm on public sector work do not also use the firm on private sector projects. He stated that although some primes work in both sectors, most of the primes specialize and do not necessarily work in both the private and public sector.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that those prime contractors that use the firm in the public sector would also use the firm in private sector work, but usually the primes that work on ODOT public sector projects do not work in the private sector.

Interviewee TA #6, the president of a minority business development agency, stated that the prime contractors that use his clients on public sector work do not use the firms for private sector work. He stated the prime contractors solely use his clients to meet the DBE goals. He stated that it does rarely occur that the prime contractors that have utilized DBE firms and found them to be capable hire the firm again. He said, "It happens; not often, but it happens."

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that the prime contractors who work in the public sector do not usually work in the private sector, so they do not use the same subcontractors in both the public and private sectors.

Some interviewees reported that they have been denied the opportunity to submit a bid or price quote to a prime contractor. [Interviewees #: 14, 20, 24, 34, 41, 44, 45, TA #2, TA #7, TA #8]. Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, reported that he has been denied the opportunity to bid, though it was not recent, and, at the time, he was not with his current company. He said that when he was denied the opportunity to bid, he first had a normal telephone conversation, during which he was invited to come look at some potential work and to give a quote, but when he appeared on site, he was denied the opportunity to submit a quote, and he was not spoken to again by that representative of the company.

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, stated he has been denied an opportunity to submit a bid because the prime contractor had heard negative reports about quality.

Interviewee #24, the Caucasian male owner of a utilities construction firm, reported that jobs with telephone coops are difficult to bid on and his firm has been denied the opportunity to bid on several occasions.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm, stated that the firm has been denied the opportunity to submit a bid or price quote to a prime contractor on a Native American-sponsored project because they only solicit Native American DBE firms.

Interviewee #41, the Hispanic male owner of a DBE-certified trucking firm, said that recently he contacted a local prime contractor to get some additional information needed to submit a bid, but when he told that prime that his English was not very good, the prime contractor got frustrated and refused to provide the information, instead asking, "Have you guys ever bid a job before because you're supposed to know what to bid." Interviewee #41 related that he needed to know which material supplier was the originating place for hauling in order to provide a price per ton for hauling materials, and because the prime refused to give the information, his firm could not submit a bid. He noted that firms will not explicitly tell you that they do not want you to submit a bid, but the uncooperative responses and unwillingness to provide information necessary to prepare a bid makes it impossible for the firm to submit a bid. He said that if the prime does not speak to you in a professional and cooperative tone while attempting to get the bid, it will be impossible to work on a contract together, and, therefore, he does not continue to try to submit bids to that firm.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that he believes the firm has been denied the opportunity to submit a bid or price quote to a prime. Interviewee #44 stated that prime contractors limit what work is available for minority firms to bid on.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that the firm has been denied the opportunity to submit a bid or price quote to a prime when they require extremely high bonding capacity that prohibits small business from attempting to work on the projects. He stated that when the prime is already bonded and requires the subcontractors to have the same level of bonding, that is denying the small business the opportunity to bid and work. Interviewee #45 reported that the City of Oklahoma City MAPS projects required high bonding

capacity which prevented many small businesses from participating in the contracting opportunities.

Interviewee TA #2, the executive director of a Hispanic trade association, said that the organization had a construction company that came from Texas, and its representatives said that the company was denied the opportunity to bid due to politics.

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that a few of her clients had told her that they had been denied the opportunity to bid on work. She stated that lack of familiarity with the contractors might have something to do with it, but some subcontractors feel that race is a part of it.

Interviewee TA #8, a program coordinator and a special program consultant for a minority trucking cooperative, stated that members report that when they approach job site superintendents, they are sometimes told that there is no work on the project and thus denied the opportunity to bid on the project.

Other interviewees reported never having been denied the opportunity to submit a bid or a price quote to a prime contractor. [Interviewees #: 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 16, 17, 18, 21, 22, 23, 25, 26, 27, 28, 29, 30, 31, 32, 33, 35, 36, 37, 38, 39, 42, 43, 47, 48, TA #1, TA #3, TA #4, TA #5, TA #6, TA #10]. Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, said that he has never been denied the opportunity to bid, but he noted that as a design professional, he does not do bids or price quotes.

Interviewee #23, the African American male owner of a DBE/SDBE/MBE-certified security, construction, and food service firm, stated his firm has never been denied the opportunity to bid to a prime but shared that one prime had used them as part of their proposal for an awarded contract which never resulted in work for his firm.

Interviewee #25, the Hispanic male owner of a DBE-certified construction firm, said that his firm has never been denied the opportunity to bid, however he believes that some primes are just going through the motions to "look like they are trying to work with DBEs when they are really not considering [them]." He stated that "some primes put out invites just to look good, but I never hear back from them. At this point we don't even bother responding."

Interviewee #37, the African American male owner of a DBE-certified engineering firm, stated that he has never been denied the opportunity to submit a bid or his credentials to a prime, but sometime he knows it is a waste of time.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that the firm has never been denied the opportunity to submit a bid or price quote and that the general contractors are very receptive to their bids and regularly request work from them. He stated that he also bids on projects that do not have DBE goals.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that he has never heard of any of the bank's clients being denied the opportunity to bid or submit a price quote, but

he said that several may not have been invited to bid. He said that real problem is that the major contractors are not working hard to find minority subcontractors.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, said that he has not heard of members being denied the opportunity to bid. However, he said that he has heard from members that the process is "so complicated" that it is not worth going through the bidding process.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that he had not heard directly of any clients being denied the opportunity to submit a bid to a prime. He stated that he had heard of MBEs being the low bidder and meeting all the requirements yet being denied the job. Interviewee TA #5 stated that the job went to another company that the prime had a relationship with, and the prime wanted to work directly with that company.

Some interviewees reported that there are certain prime contractors with whom they prefer to work due to established relationships or for other reasons. [Interviewees #: 3, 5, 6, 7, 10, 11, 12, 13, 17, 20, 21, 22, 24, 31, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 47, 48, TA #1, TA #4, TA #5, TA #9]. Interviewee #3, the Caucasian male president of a civil engineering firm, said that there are firms that he would prefer to work with over others: "I don't want to work for a firm that does not have a good reputation and does not have the same goals and objectives that our firm has with respect to the quality of work."

Interviewee #5, the Caucasian male co-owner of a geotechnical engineering firm, said that there are primes with whom he prefers to work or with whom he has an established relationship. He indicated that timely payment is a factor in this.

Interviewee #6, the African American owner of a DBE-certified trucking company, said that he prefers to work with particular primes because they "make it as convenient as possible for [my team] to get in and out of [the] job site easily" so that he can move more loads when he is getting paid by the load. He added that some primes make sure that "trucking firms will make a decent wage" while some "really don't care."

Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that his company works mainly with two primes, but he noted that he would like to establish such strong relationships with other primes as well.

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, said that there are primes with whom the firm prefers to work because of their relationship with that prime and because of their historically good payment. He noted that non-Oklahoma contractors pay a lot better than companies in Oklahoma, but he added that the City of Oklahoma and Timberlake have been pretty good with their payment.

Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, reported that there is one associated general contractor with whom he prefers to work.

Interviewee #12, the owner of a female-owned non-certified civil engineering and land surveying firm, commented that "there are two to three architects that call upon us regularly." He said that the company has an established relationship with these primes and prefers to work with them.

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that there are prime contractors that they prefer to work with because those prime contractors "treat us fairly" and "they complete their work when they say they are going to complete it."

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated there are primes with whom the firm prefers to work, particularly if they have a good track record and pay quickly.

Interviewee #33, the Caucasian male president of an engineering firm, stated that there are some primes with whom he prefers to work or with whom he has established a relationship because they have proven to be good partners on projects and are good primes.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm, stated that there are primes his firm has established relationships with and prefers to work with all the time because "they are worthy and pay their bills."

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that the firm does have prime contractors with whom he prefers to work or with whom he has established relationships through the years because he is familiar and comfortable with their payment habits.

Interviewee #41, the Hispanic male owner of a DBE-certified trucking firm, reported that the firm has identified particular prime contractors with whom the firm works on a regular basis. He said that over the years, he has worked for a variety of firms that have become frequent clients and that he uses the firm repeatedly because of past working relationships.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, said that he was "sure" that his subcontractor members had certain prime contractors who they prefer to work with over others. He said "we have certain subcontractors who are very, very active." He said that they are competent, "but it is all based on who you know." He also emphasized that pricing is important.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, commented that there are primes with whom members prefer to work "because they do good business, they try to accommodate them as much as possible — in some cases they even work with them on the financing, so it's ... a proactive relationship." He said that there are a couple of primes with whom many of his members would love to work "because they know it's a good deal all the way around."

Some interviewees reported that there are no prime contractors with whom they prefer to work with over others. [Interviewees #: 8, 9, 26, 28, 45, TA #2, TA #7, TA #8]. Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that there are

no prime contractors with whom her clients prefer to work, noting that they all need work so badly that they will work with anyone.

Some interviewees reported that there are certain prime contractors with whom they will not work for a variety of reasons. [Interviewees #: 1, 2, 4, 6, 7, 10, 13, 14, 17, 20, 23, 25, 27, 30, 31, 34, 36, 37, 38, 40, 42, 43, 48, TA #4, TA #5, TA #9]. Interviewee #1, the Caucasian male chief financial officer of a Caucasian male-owned heavy highway and bridge construction firm, stated that there are "a few" prime contractors with whom they will not do business based on their integrity; he noted that those prime contractors do not do business like his firm does.

Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, stated, "I have been very disappointed with several general contractors that I have worked with due to slow pay, which he identified as between 60-90 days. He said, "I did really good work for one of them," and he is unsure whether he will work with that general contractor again due to the issues with payment.

Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, reported that last year or the year before he provided bids on three separate occasions to different prime contractors who then shared his bid with other companies in order to lower their bids. He stated that he will not now work with those prime contractors.

Interviewee #6, the African American owner of a DBE-certified trucking company, said that there are certain primes with whom he will not work because they have "poor work ethic, and ... they pay out a whole lot slower than other primes."

Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that there are "one or two" primes with whom he will not work because of their poor performance.

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, commented that there are a couple of prime contractors with whom they will not work, but the reason is mainly financial and does not have to do with their business practices. He said that they simply do not actively pursue work with certain primes, but they probably would do work for them if contacted directly by those primes.

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, commented that there are primes with whom he will not work because he thinks that their value systems are different.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, reported that there are prime contractors with whom his company will not work due to their reputation for slow pay or their reputation for pushing contractual issues because they know that his company does not have the resources to fight a legal fight on such issues.

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that there are prime contractors who he will not work with because it is "hard to get paid"; he noted that it is the prime contractor who is the issue and not ODOT.

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, said there are prime contractors his company will not work with simply because of bad past experiences with those companies.

Interviewee #23, the African American male owner of a DBE/SDBE/MBE-certified security, construction, and food service firm, stated that there is a prime that his firm will never work with because the prime is not professional or reliable.

Interviewee #25, the Hispanic male owner of a DBE-certified construction firm, declared the only prime he may not work with in the future is a commercial construction company that owes his firm money.

Interviewee #30, the Caucasian male co-owner of a transportation firm, stated that he will not work with companies that are financially unstable.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated that the firm will not work for some primes because of past experience with slow pay.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm, stated that he will not work with primes and contractors that are self-insured and self-bonded. He stated, "If you get into a situation where there is a disagreement, the lawyers take over and the money prevails."

Interviewee #35, the Caucasian female vice president of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated that there are some primes with whom the firm will not work because of payment issues.

Interviewee #36, a Caucasian female senior engineer of an engineering firm, stated that for personal reasons there are some primes that she does not work with.

Interviewee #37, the African American male owner of a DBE-certified engineering firm, stated that there are some primes he will not work with, usually because of past work history of unfair treatment or unfair pay history.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, reported having performed as a subcontractor for another prime on a different ODOT project, and the prime contractor constantly requested duplicates of data sheets, which are quite expensive to reprint. He reported that the firm does not work with this particular prime contractor anymore.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, said that the firm has identified some prime contractors with whom the firm will not work due to past work experience in which the prime did not pay promptly or created a difficult work environment.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that there are some primes the firm prefers not to work with because of individual personalities and

because the firm might be in direct competition with the firm he subcontracts with on a regular basis. He stated that he would not want to create a conflict and jeopardize the established working relationships, so he is selective about creating working relationships with particular firms.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, reported that there are primes with whom members will not work because they feel that the prime's "demands ... are unrealistic. There [are] no accommodations, and ... if they don't meet whatever standard that they want, ... it is a way ... for them to get knocked out of the contract."

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated there are particular clients that his clients will not work with based on bad experiences. He related a scenario of bid peddling, wherein a prime chose to work with a particular subcontractor and instructed that particular subcontractor to alter their bid according to the other bids received.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that his clients have reported there are primes that the clients do not want to work with because they feel the primes do not want the DBE firms to be successful.

Other interviewees reported that there are no prime contractors with whom they would not work. [Interviewees #: 8, 9, 11, 12, 16, 21, 24, 26, 28, 32, 33, 39, 41, 44, 45, 47, TA #2, TA #6, TA #7, TA #8]. Interviewee #12, the owner of a female-owned non-certified civil engineering and land surveying firm, said that there are no prime contractors with whom the company will not work. However, he said that before the company commits to working with someone, they "would check out both them and the project."

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, commented that the firm does not have particular primes with whom he would prefer to work. He said, "If we can do the work, we will do it for anybody."

Interviewee TA #6, the president of a minority business development agency, stated that his clients do not have primes with whom they will not work because they will work with anyone who will give them a job.

III. Experiences in the Private Sector and Public Sector.

A. Trends in public sector work versus private sector work.

Some interviewees reported that their mix of private and public sector work has remained approximately the same over time. [Interviewees #: 1, 4, 5, 11, 24, 28, 30, 33, 35, 38, 40, 45, 47, TA #2, TA #3]. Interviewee #1, the Caucasian male chief financial officer of a Caucasian male-owned heavy highway and bridge construction firm, stated that the amount of private sector work has remained consistent, although with the current economy there is not a lot of work available in the private sector.

Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that there has not been a particular trend toward or away from private sector work but that his work has remained

about the same. He stated that in 2009 the mix of work varied a lot with an increase in work in the private sector.

Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, said that public sector work is pretty steady all year. He said that private sector work comes in spurts, and the mix of work changes from year to year. He added that the most private sector work occurs either at the beginning of year or at end of the year.

Interviewee #24, the Caucasian male owner of a utilities construction firm, shared that he has noticed no particular trends toward or away from private sector work and that the mix of work has remained fairly consistent over the last several years.

Interviewee #28, the Native American female president of a trucking and excavating firm, stated that their mix of public and private work has remained constant from year to year and there has not been a trend toward or away from the private sector.

Interviewee #30, the Caucasian male co-owner of a transportation firm, stated that there has not been a particular trend toward or away from private sector work. Interviewee #30 stated that "as the economy gets better, there are more opportunities in the public sector."

Interviewee #35, the staff Accountant of a firm providing specialty services in the construction industry, stated that the firm's proportion of work has remained constant from year to year and there has not been a trend toward or away from the private sector.

Interviewee #38, the Native American female president of an engineering firm, reported no recent trend toward or away from private sector work and that the proportion of work has generally remained constant from year to year.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, reported that over the years, the private and public sector mix of work has remained constant because the private sector projects are short-term, whereas the public sector involves long-term higher priced projects.

Interviewee TA #2, the executive director of a Hispanic trade association, mentioned that he has not seen a trend toward or away from private sector work. However, he noted that many companies would like to go into the public sector more.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that the mix of private and public sector work does not change because most of the work is in the private sector.

Other interviewees reported a trend toward private sector work. [Interviewees #: 2, 7, 43, 44, TA #3, TA #5, TA #6, TA #8]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, said that there has been a trend toward work that he termed "commercial and industrial" [which he later described as primarily concrete work for various private hotels].

Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that the company is trending toward the private sector to diversify its business. He added that the firm began with 100 percent government work had has added private work more and more.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that three years ago the firm started experiencing a trend away from public sector work and towards private sector work. Interviewee #43 noted that the firm did a lot of work with ODOT in the past, but recently there has been a trend toward private sector work.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that their firm has experienced a trend away from public work because the work is not available. They stated that they recognized the trend moving more to the private sector about two years ago when they came back to Oklahoma.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated the trend is moving toward private work and follows the ups and downs of the economy. He stated that the overall number of projects has declined from a year and a half ago, when there would be 300–400 projects on a bid letting, whereas today its ranges around 130–150.

Interviewee TA #6, the president of a minority business development agency, stated that the trend has been more towards private sector work because "red tape has gotten worse." He stated that in the public sector, opportunities for work are put into packages that do not match up with the capacity of his clients. As an example, he said that the scope of the work required may be too large by design. He said that many have mentioned that reducing a bid package to an amount that would give the small operator an opportunity to get the job would be better than having a huge scope of work that a small operator does not have the capacity to bid.

Interviewee TA #8, a program coordinator and a special program consultant for a minority trucking cooperative, stated that the trend has been toward private sector work because the work in the public sector, particularly with ODOT, is simply not available for African American trucking companies and owner/operators.

Other interviewees reported a trend toward public sector work. [Interviewees #: 3, 6, 8, 9, 10, 12, 16, 20, 21, 25, 26, 29, 31, 34, 36, 37, 39, 42, TA #1, TA #4, TA #7, TA #10]. Interviewee #3, the Caucasian male president of a civil engineering firm, said that his firm is very diversified, and they were trying to make a push more toward some private sector work in order to further diversify, but that work is "non-existent" now due to the economy.

Interviewee #9, the African American owner of a non-certified trucking company, said that there has been a trend toward public sector work because of stimulus funds.

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, noted a trend toward public work caused by the fact that commercial construction has generally stopped and by real estate development problems. She noted that everything is generally related to the economy.

Interviewee #12, the owner of a female-owned non-certified civil engineering and land surveying firm, said "One of our problems is we enjoyed so much private sector work that we didn't actively pursue the public sector work, so now the private sector is in a downturn, we're actively seeking public work." He said that in the past, most of the company's work has been in the private sector.

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, said that he has seen a trend away from private sector work "in the last year and a half" due to "no work in general" in the private sector, but it varies from year to year.

Interviewee #21, the Caucasian male general manager of a Caucasian male-owned bridge construction firm, said that there is a trend away from private sector work currently, but that it depends on the market at any given time.

Interviewee #25, the Hispanic male owner of a DBE-certified construction firm, stated that the mix of work for his firm has shifted dramatically over the last couple of years from a majority of private sector work to a mix dominated by public sector contracts. He stated, "Some of this has to do with stimulus money and the economy." He said that the trend toward public work is his preference because it is simpler to do just highway work. He states "it's real simple. We can go in and get out and it's profitable."

Interviewee #26, a supervising manager of a Caucasian-owned construction firm, stated that he does believe the mix of private and public jobs shifts towards public work in a down economy.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated that recently the trend has been away from private sector and more toward public sector work. She stated that the firm has started to do more work on City and County projects. She said that last year a substantially larger portion of their work came from the public sector.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm, stated that the recent trend has been away from private sector work whereas in the past the proportion of work was toward the private sector. He stated that the firm had already begun to make a change toward public work "because the contracts are larger."

Interviewee #36, a Caucasian female senior engineer of an engineering firm, stated that the trend in the local market has been away from the private sector. She stated that the mix of private versus public sector work opportunities does vary year by year, but because of the government's Recovery Act there have been a lot more opportunities in the public sector.

Interviewee #37, the African American male owner of a DBE-certified engineering firm, stated that because of the economy, the trend has been away from private sector projects because those projects have been put on hold. He said that he has had commitments to work on projects in the private sector that fell apart because of finances.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, reported that the trend has been away from private sector work over the past year because of the conditions of the economy.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, reported that his members do very little work in the private sector. He said that there has been a trend away from private sector work because the economy has had a greater effect on the private sector. He reported that, in contrast, "there is a constant flow of road and bridge money."

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, said that there is a general trend away from private sector work because of an issue with transparency. He said that the mix of work varies from year to year. He said that "there's a ton of public sector work going on. There's not a lot of private sector work.... Over time, especially in the ... early part of this last decade, there was a lot of public sector work because Oklahoma went on a huge transportation bond initiative, ... so there was a lot of public sector work going on, and a lot of people benefited from that."

Interviewee TA #7, the director of an organization that provides assistance to small businesses, said that in the last few years, more public work has become available, but it is not necessarily accessible to her clients.

B. Private sector work experience.

Some interviewees reported working predominately in the private sector, success working in the private sector, or a preference for work in the private sector. [Interviewees #: 8, 9, 15, 28, 30, 31, 43, 44, 45, 46, TA #2, TA #3, TA #5, TA #6, TA #7, TA #8, TA #9, TA #10]. Interviewee #8, the African American president and owner of a civil and structural engineering firm, said that he does do work for a university, but his position with them is as a part-time engineer. He reported that in the private sector your name gets out there, and "individuals know that you can provide a service, and once you start initially working for them, they generally just come back."

Interviewee #9, the African American owner of a non-certified trucking company, said that his company's work is approximately 75 percent private sector work, and that has remained fairly consistent.

Interviewee #15, the Caucasian male co-owner and manager of an engineering firm, reported that approximately 98 percent of his work is private, and 2 percent is public. He said that he designs housing additions, which is private sector work. He added that he also designs "a lot of public streets ... doing subdivisions, but I'm not working for the municipality. I'm working for the private developer when I do it.... The cities aren't paying me; the clients are."

Interviewee #28, the Native American female president of a trucking and excavating firm, stated that 80 percent of the firm's work comes from the private sector and 20 percent from the public sector.

Interviewee #30, the Caucasian male co-owner of a transportation firm, stated that 100 percent of the firm's work is in the private sector. He reported that over the years, the firm's mix of work included 10 percent work in the public sector and 90 percent work in the private sector.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated that 70 percent of the firm's work is in the private sector, and 30 percent of the firm's work comes from the public sector.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that 15 percent of the firm's work comes from the public sector and 85 percent comes from the private sector. Interviewee #43 reported that the firm has done more work with ODOT than in the private sector but stated, "I've had more problems with the ODOT work than in the private sector."

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that 70 percent of the firm's revenue comes from the private sector and 30 percent from the public sector.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that 90 percent of the firm's work comes from the private sector.

Interviewee #46, the African American male owner of a DBE-certified safety and environmental consulting firm, stated that the firm performs solely in the private sector and has never completed a project in the public sector.

Interviewee TA #2, the executive director of a Hispanic trade association, said that the majority of the members' work, approximately 90-95 percent, is in the private sector.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, reported that most of the bank's customers "have to be successful in the private sector" because ODOT is not hiring them.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that his clients reported working 40 percent of the time on public sector work, which includes tribal work, and 60 percent of the time on private sector work.

Interviewee TA #6, the president of a minority business development agency, stated that 99.9 percent of his clients' work comes from the private sector, and 0.1 percent of his clients' work comes from the public sector "because of the difficulty getting through the bureaucracy of the City." He stated, "The 'Good Old Boy Network' of contractors [is] comfortable working with certain subcontractors. They are going to work with them all the time. If you don't have a relationship with a prime contractor, you are not going to get a job."

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that her clients perform approximately 85 percent of their work in the private sector and approximately 10-15 percent of their work in the public sector. She indicated that her clients are trying to do more public sector work, but many companies are doing more private work because that is the only opportunity many of them feel they have.

Interviewee TA #8, a program coordinator and a special program consultant for a minority trucking cooperative, stated that all work of the members of the cooperative comes from the private sector.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that to develop a history of experience for their company, many minority firms have worked in the private sector. He stated that some who have been successful have reached the point where they are interested in pursuing public sector work. He stated that many firms have mistakenly assumed that they could start out working in the public sector, which is not the case. He stated that he does not see a lot of firms working in both the public and private sectors. He said that when a business finds work opportunities in one sector they tend to remain in the sector in which they have been successful, because there is a lack of resources to expand.

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that for the majority of her clients the proportion of work is 10 percent in the public sector and 90 percent in the private sector.

Other interviewees reported challenges in connection with pursuing or engaging in work in the private sector. [Interviewees #: 3, 8, 14, TA #4, TA #5]. Interviewee #3, the Caucasian male president of a civil engineering firm, said that in order to obtain work in the private sector, you need to know people and "be in the right circles." He stated that "it is easier for me to work in the public sector," but that will differ from firm to firm.

Interviewee #8, the African American president and owner of a civil and structural engineering firm, said that "there's not as much work available" in the private sector due to the economy. He said that the public sector tends "to have a little bit more money to spend on projects." He said that at this time he thinks that the public sector has more work available. He noted that he plans to pursue some public work.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, said that the public and private sectors differ because the competitive pressures in the private sector drive profit margins down very low, and that creates a risk that is intolerable to him. He said that this is a deterrent from him bidding on a private sector project at all. He said that he thinks that this is a general condition within the private sector and is not associated with his DBE status. He said that he has not bid on "street work" (general contractor work in the private sector) in years because, even in the best of times, he found that there will be numerous competitors all competing and hoping to achieve a 3 to 4 percent profit margin. He said that this is an intolerable situation. He noted that for a subcontractor or prime to be successful in that environment, they have to be extremely skilled and experienced because they have to do large volumes, which expands the risk factor, and do it at low margins. He noted that most of the firms that are successful in that situation are multi-generational.

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that he has not done any work in the private sector for many years because there is no guarantee if you bid on the job that you will actually do the job, and "there is no guarantee that you will get paid." He stated that there "seems to be enough work for ODOT and the Oklahoma Turnpike, so we don't need to seek work elsewhere."

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, said that "on the public side" the organization's members "easily" access information on the Internet regarding what primes are bidding out for certain projects. He noted, "It's a little bit more complicated on the private side." He stated that most information is gained

through word of mouth unless "it's a major project like ... a multi-story building downtown" and, in that case, "the information is listed on legal notices in the Journal Record, which is the legal publication here."

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that most of the sources of private sector listings require subscription fees.

C. Public sector work experience.

Some interviewees reported working predominately in the public sector, success working in the public sector, or a preference for work in the public sector. [Interviewees #: 3, 5, 6, 7, 10, 13, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 29, 32, 33, 34, 35, 37, 38, 40, 42, 47, 48, TA #1]. Interviewee #5, the Caucasian male co-owner of a geotechnical engineering firm, reported that his firm does approximately 80 percent of his work in the public sector.

Interviewee #6, the African American owner of a DBE-certified trucking company, stated that his firm works 90 percent of the time in the public sector and 10 percent of the time in the private sector. He said that this shifts year to year due to the economy and other factors. He said that it really just depends on where the work is, "and right now it's in the public" sector. He added, "The bottom line is, you go where the money is."

Interviewee #7, the Native American owner of a federally-certified aerospace firm, reported that approximately 70 percent of his work is public, and 30 percent is private.

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, said that, previously, the firm's work was split equally between the public and private sectors, but in 2009, 75 percent of the work has been public work, and 25 percent of the work has been private work.

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, said that 80 percent of his work comes from the public sector, and 20 percent is private sector work.

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, reported that 99 percent of their public sector work is with ODOT (they do not work in the private sector). He stated that these projects are all for bridge construction, and he bids as both a prime and a subcontractor.

Interviewee #18, the Caucasian male treasurer of a Caucasian male-owned heavy paving and grading construction firm, indicated that almost all his company's work comes from the public sector. He mentioned that his company occasionally does railroad work, but not often. He said that they look to ODOT for their public sector work simply because the State builds the most roads and that is the firm's specialty.

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned non-certified engineering firm, stated that the firm obtains all of its work in the public sector, and the amount of work has remained consistent because the firm does not pursue opportunities in the private sector. He noted that the firm can be confident that it will get paid on public sector work, that the work appears to be stable, and that the firm has good relationships with people in the public sector.

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, said that about 75 percent of his company's work is public sector work. He further indicated that the mix does not vary year to year, but this is attributable to a bonding capacity issue unique to his company.

Interviewee #21, the Caucasian male general manager of a Caucasian male-owned bridge construction firm, indicated that 90 percent of his firm's business is from the public sector, and of that portion of work 85 percent of their public work is from ODOT. He noted that his company's preference is to do work for ODOT.

Interviewee #22, the Caucasian male owner of an aerial mapping firm, stated that 100 percent of his firm's work is in the public sector including state agencies, ODOT, municipalities, and tribal organizations. He stated that typically these entities contact him and he meets to discuss his qualifications in an interview both formal and informal.

Interviewee #23, the African American male owner of a DBE/SDBE/MBE-certified security, construction, and food service firm, said that 90 percent of his firm's work is for public sector clients. He stated that his firm prefers public sector work because of the nature of it.

Interviewee #24, the Caucasian male owner of a utilities construction firm, declared that 75 percent of his work is public and 25 percent is private, but he has no particular preference for either type of work. He further stated, "I haven't had any trouble with either type; they both pay."

Interviewee #25, the Hispanic male owner of a DBE-certified construction firm, reported that 75 percent of his firm's work comes from the public sector and 25 percent from the private sector.

Interviewee #26, a supervising manager of a Caucasian-owned construction firm, declared that 90 percent of the firm's work is public with only 10 percent being private. He stated, "Right now more public is available with [a] few private jobs here and there, which seems to follow the economy."

Interviewee #27, the Caucasian female owner of a DBE-certified erosion control firm, stated that all of her firm's work is public sector work through ODOT. She reported that she will not seek out any private sector work "until we get better."

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that he does approximately 80 percent of his work in the public sector and 20 percent in the private sector.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that 100 percent of the firm's work is in the public sector.

Interviewee #33, the Caucasian male president of an engineering firm, stated that 90 percent of the firm's work is in the public sector and 10 percent in the private sector.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm, stated that 90 percent of the firm's work comes from the public sector and 10 percent of the firm's work comes from the private sector.

Interviewee #35, the African American accountant of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated that the 10-15 percent of the firm's work is derived from the private sector and 85-90 percent of the firm's work is derived from the public sector.

Interviewee #37, the African American male owner of a DBE-certified engineering firm, stated that 70 percent of his work comes from the public sector and 30 percent from the private sector.

Interviewee #38, the Native American female president of an engineering firm, stated that 90 percent of the firm's work comes from the public sector, including work for Indian Nations, and 10 percent comes from the private sector.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that the firm works both in the public and private sector. He reported that 75 percent of the firm's work comes from the public sector and 25 percent of the firm's work comes from the private sector. He commented that he prefers working in public sector because he has a long standing relationship with ODOT.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that 100 percent of the firm's work comes from the public sector. She said that in the past, the ratio has been 50 percent public and 50 percent private, so this is a change.

Interviewee #47, the Caucasian female president of a WBE-certified trucking company, stated that 92 percent of the firm's work comes from public sector work and 8 percent of the firm's work comes from the private sector.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that 100 percent of the firm's work and revenue comes from the public sector. He stated that he performs work with a Native American tribe and ODOT. He stated that he tries to stay away from private sector work because these public sector entities are financially secure.

Some interviewees reported challenges in connection with pursuing or performing work in the public sector. [Interviewees #: 2, 5, 10, 11, TA #4, TA #6]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, said that he is not getting on any projects as a subcontractor at the federal level in Oklahoma at all. He stated that he performed almost \$8 million in highway work in the State of Texas, but he let his DBE status be dissolved in Texas to focus his energy in Oklahoma. He reported that his firm is currently getting more work on non-DOT public sector projects without DBE goals. He stated that he has done work for the City of Oklahoma. Officials from ODOT and the City came out and admired his work, but still he has not received work. He said that he attributes his inability to obtain work with ODOT to the "Good Old Boy [Network]." Interviewee #2 said that the general contractors will contact him to submit a bid, and after they are awarded the contract the general contractors will not even answer his telephone call; he said that they tell him that his bid is too high but he has reviewed the records at ODOT and reported that this is not true. He said that no one will "give me a straight answer" as to why his firm is not selected for work. He commented, "I just feel like I am going in circles." He said that he has done P.R. with various general contractors throughout the whole state of Oklahoma." He said that these contractors have remarked to him: "excellent," "don't give up," and "keep bidding." He said that one general contractor told him "once we get all the work we need, we will open up the door

and let you know." Interviewee #2 said that that was six months ago, and he still does not have any work, and he does not want to work with the general contractors anymore because he is not getting anywhere with them. He said that he believes that he would like to see subcontractors permitted to enter into direct contracts with the State.

Interviewee #5, the Caucasian male co-owner of a geotechnical engineering firm, said "The public sector takes too long to get paid." He said that this impression is mostly of ODOT and not the public sector in general. He said six months is too long to wait to get paid. Interviewee #5 noted that these projects are ones in which his firm is paid by a prime and not directly by ODOT. However, he said that the primes tell him that he will get paid within two weeks of the prime being paid by ODOT. He said that he has known people who think "that doesn't happen." He added that in his "experiences dealing directly with ODOT, [he has] no reason to suspect that the prime's holding back."

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, reported that the firm has "seen a lot of ... desperation" in firm pricing when looking for work in the public sector, but he said that this has only happened in the recession. However, he noted that this often causes the quality to drop, so even when they lose a bid, they might get a call to "straighten it out."

Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, noted that the written requirements for public sector jobs are problematic, and it is difficult to get in contact with people in the public sector.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, said that it is sometimes difficult to get public sector work. He reported, "There have been some situations" in which "the agency could have rolled out the requests for proposal and bids in a way that would have made it easier for companies, but I don't think it was ... deliberately done in order to keep specific companies from getting the contracts versus others, and that's based on follow-up inquiries." He added that in the two cases in which the organization did follow-up inquiries, the organization "found that the system was fair and was not prejudiced or deferential to anyone, and unfortunately, the two different contractors involved just didn't meet the standard."

Interviewee TA #6, the president of a minority business development agency, stated that because of the bureaucracy only some, but not many, of his clients have bid on public sector work. He reported, "After repeatedly trying and never getting anything out of the process, they don't [bid on City of Tulsa work] because it's a waste of time." He added, "Here is what I think the most difficult part for a small contractor or subcontractors is — understanding the bidding process, being able to navigate your way through all of the paperwork, being able to put together in your mind what is a competitive bid. I think there can be a little bit more of an educational curve when it comes to responding to bid opportunities for minority contractors and subcontractors. I just don't think the level of knowledge or experience is ... there to compete effectively with somebody that does it day in and day out." He stated that "the larger you are, the greater breaks you get in terms of supplies. The bigger guy buys in bulk and gets discounts. The little guy doesn't have that advantage, so they have to buy it from Home Depot or Lowes at retail. The bid [from the smaller company] is not competitive."

D. Identified differences in securing and performing work in the public and private sectors.

Some interviewees identified differences in the timeliness or certainty of payment for work in the public and private sectors. [Interviewees #: 1, 3, 4, 5, 23, 27, 33, 38, 45, 48]. Interviewee #1, the Caucasian male chief financial officer of a Caucasian male-owned heavy highway and bridge construction firm, noted that the private sector does a better job of paying for work performed.

Interviewee #3, the Caucasian male president of a civil engineering firm, said that payment is timely in the private sector. He said that in the public sector, the question is not whether you will get paid but when; in the private sector, you might not get paid, but if you do get paid, it will be timely. He said that in the public sector he has had to wait for payment up to 300 days out. He commented that ODOT is getting better with their payments.

Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that payment in the private sector is better and faster than in the public sector.

Interviewee #5, the Caucasian male co-owner of a geotechnical engineering firm, stated that "the public sector takes too long to get paid." He said that his impression is mostly of ODOT and not the public sector in general. He said six months is too long to wait to get paid.

Interviewee #23, the African American male owner of a DBE/SDBE/MBE-certified security, construction, and food service firm, stated that getting paid in the private sector can be a challenge. He described one incident that required his firm to go to court to win a settlement against a private client to obtain payment that was owed to him.

Interviewee #27, the Caucasian female owner of a DBE-certified erosion control firm, stated that the difference between private and public sector work is that "the money rolls so much better and it's guaranteed with ODOT, so ODOT work is much better than private sector work."

Interviewee #33, the Caucasian male president of an engineering firm, stated that the substantial difference between working in the public sector versus the private sector is promptness of payments. He stated that the private sector can be slower to pay versus the public sector, which usually pays timely and on schedule.

Interviewee #38, the Native American female president of an engineering firm, stated that the private sector tends to pay more consistently with an easy turn around versus the public sector which delays payment sometimes for 60-90 days after invoicing.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that the difference in working in the public sector versus the private sector is that in the private sector the contractor dictates when payment is required versus in the public sector where payment is received usually 30 days after submitting invoicing. He stated that a small company usually cannot afford to wait 30-60 days for payment.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that when he has done a small amount of private sector work he has had to chase down payment 50-60 percent of the time. Interviewee #48 stated that the substantial difference between working in the public sector and private sector is that you have to chase your money in the private sector.

Many interviewees reported that the private sector is more profitable than the public sector. [Interviewees #: 3, 4, 5, 6, 8, 9, 12, 13, 18, 19, 20, 28, 31, 36, 39, 43, 44, TA #10]. Interviewee #3, the Caucasian male president of a civil engineering firm, said that profitability is greater in the private sector "because it is bottom-line driven," and you have more opportunity to make a profit. He said that work in the public sector is by the hour.

Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that the private sector is more profitable and cited an example in which a small change on a public sector project can take up to two weeks to resolve resulting in the effective shut-down of the project during that time period and making the project less profitable.

Interviewee #5, the Caucasian male co-owner of a geotechnical engineering firm, stated that it is easier to make a profit in the private sector, especially because you often have to do things over in the public sector without payment.

Interviewee #6, the African American owner of a DBE-certified trucking company, said that a firm usually makes more money in the private sector. He said that this is true "because the bidding is not as intensive as in the public" sector where the low bidder usually gets a project. He noted that in the private sector "they will use someone due to reputation, quality of work, and they might be a little bit higher than the next sub, but they know that the quality of work will get done ... in a timely manner, so they ... will pay a little more money for that convenience."

Interviewee #8, the African American president and owner of a civil and structural engineering firm, reported that profitability may differ because there are so many specifications involved in public sector work, and you are held strictly to those. He said that the private sector is different because there you can set an hourly rate or negotiate a fee, so you can probably do a little bit better in the private sector.

Interviewee #9, the African American owner of a non-certified trucking company, said that the private sector "probably pays a little better."

Interviewee #12, the owner of a female-owned non-certified civil engineering and land surveying firm, said that profitability is greater in the private sector because of the project review process in the public sector and the different levels of review, which are time-consuming.

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, said, "It's probably more profitable in the private sector."

Interviewee #18, the Caucasian male treasurer of a Caucasian male-owned heavy paving and grading construction firm, said that the opportunity exists for higher profit margins in the private sector because the public sector is all about competitive bidding.

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned non-certified engineering firm, said that the private sector might be more profitable than the public sector.

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, said that profit margins are significantly better in the private sector.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that private sector projects tend to be more profitable than public sector projects because you can negotiate the price. Interviewee #43 stated that in the private sector the owners are sometimes willing to pay a little more for service.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that the private sector projects tend to be more profitable than public sector projects because you can negotiate the price. Interviewee #44 stated that in the private sector the owners are sometimes willing to pay a little more for service.

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that profitability in the private sector is greater because the contractor can control the percentage of profit on each project to some degree. She stated that in the public sector, the agency dictates the amount of profit margin in each project and limits the prices for each service.

Some interviewees reported that the public sector is more profitable than the private sector. [Interviewees #: 2, 14, 23, 26, 29, 34, 37, 40, 45, 48, TA #2, TA #4, TA #5, TA #6, TA #9]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, said that profitability "absolutely" differs between the public and private sectors. He said that his firm makes a lot more money doing public sector road work.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, said that he is more profitable in the public sector.

Interviewee #23, the African American male owner of a DBE/SDBE/MBE-certified security, construction, and food service firm, stated that public sector work has been more profitable than his limited experience in private sector work.

Interviewee #26, a supervising manager of a Caucasian-owned construction firm, shared that the real difference between public and private market conditions is "profitability; public work has the potential for larger profit margins."

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm, stated that the profit margin is less in the private sector because there are always additional explanations needed to justify changes or additional items that are required because the architects frequently miss things.

Interviewee #37, the African American male owner of a DBE-certified engineering firm, stated that profitability is greater in the public sector because costs are built into the project. He stated that the public sector "expects more, but they pay more."

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that he believes it would be more profitable to work in the public sector, but the firm has not had the opportunity to do much work in the public sector and survives on private sector work.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that the profitability is greater in the public sector than the private sector because you are dealing with bonded companies, prompt payment clauses and guaranteed funding sources, and oftentimes in the private sector you cannot recover all your money. He stated that general contractors do not get their final payoff until subcontractors confirm they have been paid in the public sector.

Interviewee TA #2, the executive director of a Hispanic trade association, reported that "in the public sector there [are] more opportunities for ... better pay ... and bigger contracts."

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, said that profitability differs hugely between the private and public sectors. He said that his members "feel ... that they have a better chance of making a profit on their [public sector] project[s] than they do on the private sector side because sometimes there will be adjustments or modifications, and they feel compelled to eat ... most of that in order to maintain the contract or to maintain the relationship, where they don't feel that same pressure on the public side."

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that in his experience, the profit margin in the public sector work is greater than the private sector work.

Interviewee TA #6, the president of a minority business development agency, stated that the profit margin is less in the private sector than in the public sector because there are not as many negotiations in the public sector.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated the profit is larger in the public sector, including through ODOT, if the minority firms are allowed to receive contracts and do the work. Interviewee TA #9 stated that because the firms are probably already doing some private work and have covered most of their overhead, additional projects in the public sector would yield a higher percentage of profit.

Many interviewees reported that it is easier to secure work in the private sector. [Interviewees #: 2, 5, 9, 11, 12, 13, 16, 20, 24, 28, 30, 31, 40, 43, 44, 45, TA #3, TA #5, TA #6, TA #7, TA #8, TA #9, TA #10]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, said that it is easier trying to get work in the private sector over the public sector, "but it shouldn't be. I don't understand why it is." He said that he could understand an incompetent firm having difficulty obtaining work in the public sector, but noted that his firm is very competent and could do all of the required work but still has had a difficult time obtaining work in the public sector. Interviewee #2 said that he came to Oklahoma four to five years earlier to work with ODOT, but he has not been successful.

Interviewee #5, the Caucasian male co-owner of a geotechnical engineering firm, stated that getting work in the private sector involves "a lot less paperwork, a lot less hassle." He said that it is generally easier to get work in the private sector.

Interviewee #9, the African American owner of a non-certified trucking company, said that working in the public and private sector is "pretty much the same." However, he said that to get work in the public sector, you have to seek it out, but in the private sector, people will call you. He said, "It's

easier getting work in the private sector," but this may change as the industry trends toward public work.

Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, stated that it is easier to get work in the private sector because most of that work is based on his ability, and people just call him and ask him to do jobs.

Interviewee #12, the owner of a female-owned non-certified civil engineering and land surveying firm, said that the company enjoys "a good reputation in the private sector with land developers" and has established clients and new people that call upon the firm due to its reputation. He commented that it is easier to get work in the private sector because of the company's reputation. He added that "in public, you have to go out and seek those jobs, and in many cases it's a competitive level." He noted that there are often political considerations in the public sector.

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, said that it has been easier to get work in the private sector because "they're looking for someone who can get the work out quickly, and they know ... what you can do.... In the [public] sector, they have requirements that they have to advertise. They have to interview everybody.... They have a selection process that's a little more tedious, but in the private sector, it's more about relationships, and if they like your work, they come to you ... They don't have to go through a selection process."

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, said that he has had more success getting work in the private sector, and he attributes this to "the one-to-one relationship because in public, the guy in charge of certain things may be moved up, down, out, so the next guy coming in there — he [does not] know you, and it takes a while to establish that trust ... and let them know what your capabilities are."

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, said that it is harder to get work in the public sector because you are expected to do "something for nothing," but the market conditions have made it difficult to obtain any work in the private sector as well.

Interviewee #24, the Caucasian male owner of a utilities construction firm, stated that the only difference in trying to get public sector work as opposed to private is that public sector work usually requires more paperwork and takes more time, but "that doesn't dissuade me from going after it."

Interviewee #28, the Native American female president of a trucking and excavating firm, stated that attempting to get work in the private sector is usually easier because the solicitations and invitations to bid come to the firm.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated that it is easier to attempt to get work in the private sector than in the public sector because of the bidding process and competition. She said that because of the firm's relationships with general contractors, "they just call when they have a job." In contrast, she said that the public sector is extremely competitive because it is an open-bid process that is slow, and the selection process involves a no-compete, non-collusion, best bid method of procurement.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that it is more difficult to get jobs in the public sector because you have to submit credentials and hope to get on the short list. He said that getting work in the private sector is much easier because owners initiate the contact when they have a specific need.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that it is easier getting work in the private sector than in the public sector because there is not as much politics involved in the private sector. He stated, "[In the private sector] if you've got a reputation and your price is right, you can get the work." Interviewee #43 stated, "That is not always true in the public sector [ODOT]." Interviewee #43 stated that attempting to get work in the public sector involves looking at the lettings and submitting bids versus the private where you can negotiate the work agreement.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that it is easier getting work in the private sector because securing contracts is not as political in the private sector. They stated that attempting to get work in the public sector involves looking at the lettings and submitting bids, versus the private where you can go and meet and negotiate a work agreement with the customer.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that attempting to get work is easier in the private sector because you can set your prices and talk directly with the owners regarding pricing.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that although much depends on the size of the project, it is easier to secure and work on private sector jobs because the contract administration is less intense than in the public sector.

Interviewee TA #6, the president of a minority business development agency, reported that it is easier to get work in the private sector. He indicated that he did not know why this was true, other than the "Good Old Boy Network' is engrained in the public [sector]." He reported that "[contractors] know who they will and won't work with and who they will give opportunity to work. If somebody knows 'Joe' and Joe is handling procurement, you talk to Joe about giving your friend an opportunity, and Joe is going to give your friend an opportunity."

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that the public sector is more "political" and requires relationships with certain companies and an effort to keep doing business with those companies. She said that it is easier to obtain work in the private sector. She indicated that the same companies keep getting contracts in the public sector and that if her clients complain, they get cut out of the loop.

Interviewee TA #8, a program coordinator and a special program consultant for a minority trucking cooperative, stated that it is easier to get work in the private sector.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated the major difference in attempting to get work and performing work between the private sector and the public sector is that more needs to be done to make MBE/WBE/DBE firms aware of opportunities in the public sector. Interviewee TA #9 stated that

securing work in the private sector is easier because there is less overhead, there is less background history and other information required to secure work. He stated that in the public sector there are more government regulations and bonding requirements. He stated that it is easier to secure work in the private sector than in the public sector because the bonding and insurance requirements are a barrier in the public sector.

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that it is easier to obtain work in the private sector because the public sector requires volumes of paperwork, there are precise specifications, and understanding the federal regulations associated with government contracting can be difficult.

Some interviewees reported that it is easier to secure work in the public sector. [Interviewees #: 10, 21, 23, 29, 37, 42, 48, TA #4]. Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, said that it used to be easier and less complicated to get work in the private sector when the private sector was booming, but once the recession began, "certain public sectors were easy to get work in."

Interviewee #21, the Caucasian male general manager of a Caucasian male-owned bridge construction firm, said that it is probably easier to get work in the public sector, due to the availability of information on projects.

Interviewee #37, the African American male owner of a DBE-certified engineering firm, stated that it is easier attempting to get work in the public sector because they have to announce what projects they plan to complete. He noted that the private sector tends to have more leeway in selecting who they hire and there is less transparency versus the government, which has more rules and regulations.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, commented that it is easier attempting to get work in the public sector because usually there are more information and jobs available in the public sector.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that attempting to secure work in the public sector is easier than the private sector because all of the opportunities advertised.

Some interviewees identified differences in performing the work in the public and private sectors. [Interviewees #: 7, 10, 11, 12, 13, 14, 16, 20, 23, 28, 29, 30, 31, 34, 35, 36, 39, 40, 42, 48, TA #2, TA #3]. Interviewee #7, the Native American owner of a federally-certified aerospace firm, reported that the government sector is "more regulated, ... and it's more cumbersome." He said that there are more requirements that you have to meet while performing work in the private sector. He noted that the commercial process moves much faster and is based more on relationships.

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, reported that the differences between working in the public and private sectors include the paperwork being more onerous in public sector.

Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, commented that there is much more leeway to get your work done in the public sector, and it is more difficult in the private sector. He said that the private sector generally has more money available to get the job done. He said that the public sector expects companies to do work before they get to draw any money. He said that this is a real problem with working in the public sector because it is hard to go from contract to contract to survive.

Interviewee #12, the owner of a female-owned non-certified civil engineering and land surveying firm, reported that there are differences in working in the public sector versus the private sector, including "the amount of review within the public work [and] the paperwork involved" in the public sector.

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, said that he thinks "it's easier to do work in the private sector."

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, said that on smaller projects, the administration and compliance with rules and regulations are a little less arduous in private sector work.

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, said "Working [in the] public sector, you have more rules and regulations to follow and more paperwork and more bureaucracy." He added, "In private work, the relationship is on a one-to-one basis, and if you have repetitive clientele, the work can go much more smooth[ly] than in the public sector." He said that it is easier to do work in the private sector.

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, said there are substantial differences to working in the public sector versus the private sector, noting that "the entire approach is different."

Interviewee #23, the African American male owner of a DBE/SDBE/MBE-certified security, construction, and food service firm, shared that he prefers public sector work, because in the private sector, "the customer is always right and that [is not] always right."

Interviewee #28, the Native American female president of a trucking and excavating firm, said that it is easier attempting to do work in the private sector only because the firm has not done a lot of work in the public sector.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that private sector projects want quotes, and the customers tend to want to negotiate on the pricing. He stated that price negotiating is the biggest difference between working in the public versus private sector, which is why he does not solicit private sector work often. Interviewee #29 stated that it was easier performing work in the public sector than in the private sector because the jobs have the quantities and volume that increase the profit margin, whereas a private sector job may only be a single load.

Interviewee #30, the Caucasian male co-owner of a transportation firm, stated that it is easier to work with private sector work because he is familiar in that area, and public sector work would require additional time to become familiar with it.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated that the biggest difference between working in the public sector versus the private sector is that working in the public sector requires a massive amount of paperwork. She added that working for general contractors in the private sector is easier because the contractors say, "We like you, we know you, and we want you." Interviewee #31 stated that there are additional safety issues, such as OSHA, required in public sector work. She added that the public sector projects are more time-consuming and labor-intensive. In contrast, she stated that private sector projects allow firms complete access to the work areas, which permits faster completion of the scope of work.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm, stated that it is easier attempting to do work in the public sector because everyone involved understands the process and the projects.

Interviewee #35, the African American accountant of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated that the significant difference between working in the public sector versus the private sector is that there are more regulations in the public sector.

Interviewee #36, a Caucasian female senior engineer of an engineering firm stated that the substantial differences between working in the public sector versus the private sector is that there are a lot more regulations such as FAR regulations, and more regulatory structure and compliance issues in the public sector. She stated that these additional regulations require additional project management for firms.

Interviewee #39, the Caucasian female contract administrator of a Caucasian male-owned construction firm, stated that the substantial difference between working in the public sector versus the private sector is that the public sector projects are more controlled, and the paperwork and payment process is a lot more refined.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that he is familiar with what ODOT expects, and he is comfortable with the specifications and special provisions. Interviewee #40 stated that in the public sector the specifications are all clear and laid out, whereas in the private sector much depends on the expectations of each individual owner who may want a variety of things or may not be clear as to exactly what they want. Or, what they need may differ from the initial contact and they will continue to add on requests for additional services.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, said that the significant difference between working in the public sector versus the private sector is the amount of paperwork involved in the public sector, particularly the certified payroll requirements.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that performing work in the private sector is easier than working in the public sector because there

are no inspectors like there are at ODOT and usually the contractor can do whatever they need to do to get the project completed. Interviewee #48 stated that it is easier performing the work in the private sector because there are no steadfast rules and regulations like in the public sector.

Interviewee TA #2, the executive director of a Hispanic trade association, said that he thought that it was generally easier to perform work in the private sector because the projects are generally smaller.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that he thinks that there is a substantial difference in working the public and private sector. He stated that working in the private sector is easier because there are not so many requirements and restrictions associated with the work, such as bonding requirements, etc. He commented that there is a "different degree of oversight with ODOT" that makes it more difficult to work with ODOT.

Some interviewees identified differences in the timelines for performing work in the public and private sectors. [Interviewees #: 3, 4, 13, TA #4]. Interviewee #3, the Caucasian male president of a civil engineering firm, said that work in the private sector tends to have time constraints that are more rigid, if not impossible. He said that government work is "more reasonable in term[s] of time ..."

Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, reported that projects in general are slower in the public sector due in part to traffic and other regulations.

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, said that there are differences in working in the public and private sectors, including delivery time. He said, "In the private sector, usually the deadlines are shorter ... In the public sector, [it seems] like you have ample time to complete the project."

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, said that subcontractor selection is "definitely" different in the public and private sectors. He noted, "The timelines ... to turn around your Request for Proposal, [are] much better, whereas in the private sector ... the turnaround time is really one of the biggest complaints among a lot of our contractors, that they don't have enough time in order to properly put something together in order to be considered for the project."

Some interviewees identified other differences in securing or performing work in the public and private sectors. [Interviewees #: 6, 14, 34, 36, 40, TA #4, TA #5]. Interviewee #6, the African American owner of a DBE-certified trucking company, noted that the private sector generally has smaller jobs, so you have to work more to make ends meet in the private sector.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, said that "[firms are] afforded more protection [in the public sector]. I mean, it's a trade-off."

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm stated that the substantial difference between working in the public and private sectorx is that the public sector has larger jobs versus the private sector.

Interviewee #36, a Caucasian female senior engineer of an engineering firm, stated that in the public sector there is a scope, budget, and schedule that you have to develop. She stated that another difference between the public and private section is the interaction with the client. She stated that in the public sector you interact with the contracting officer rather than working directly with the individuals who actually work on the projects.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that the major difference between working in the public and private sector is that the public sector offers long-term projects and requires more paperwork versus the private sector projects, which tend to be short-term.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, said that subcontractor selection is "definitely" different in the public and private sectors. He noted, "In public sector jobs there is more transparency; the information is more readily available." He said, "In the public sector process, it is procedural, so everybody understands the process"

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that there is more access to public sector opportunity listings, which are free. Interviewee TA #5 stated that most of the sources of private sector listings require subscription fees.

Some interviewees identified a number of similarities between their experiences pursuing and performing work in the public and private sectors. [Interviewees #: 1, 4, 6, 7, 10, 17, 24, 26, 28, 30, 33, 35, 38, 39, 41, 42, 43, 44, 45, 47, TA #5, TA #10]. Interviewee #1, the Caucasian male chief financial officer of a Caucasian male-owned heavy highway and bridge construction firm, said that it is no easier to obtain work or actually perform work in either the private or public sectors and that their experience has been the same. He stated that profitability does not differ across the two sectors.

Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, reported that there is no difference now between trying to obtain work in the private versus the public sectors; he stated that jobs are currently scarce, and everyone wants them.

Interviewee #6, the African American owner of a DBE-certified trucking company, said that getting work in both sectors is based on relationships. He added that there are not substantial differences in performing work in the public and private sector. He noted that doing work is "about the same" in each sector, and there is not one sector in which he would prefer to work.

Interviewee #7, the Native American owner of a federally-certified aerospace firm, reported that profitability does not differ much between the public and private sector "because in this market we have to be as lean as we possibly can."

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, said that the work product is pretty much the same in the public and private sectors. Interviewee #10 noted that profitability does not generally differ between the public and private sector, and profits from the two sectors generally balance out because they try to use the same basic pricing protocols in public and private sectors.

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that when he did work in the private sector, he did not note any differences in profitability as between the public and private sectors.

Interviewee #24, the Caucasian male owner of a utilities construction firm, stated that he has not experienced any real difference in doing work in the private and public sectors. He said that the profitability of both the private and public sector jobs is about the same and both "have the same issues."

Interviewee #25, the Hispanic male owner of a DBE-certified construction firm, stated that there has been no difference in his experience in the difficulty of obtaining work in the private and public sectors.

Interviewee #26, a supervising manager of a Caucasian-owned construction firm, said that his firm has experienced no real difference between obtaining private and public work.

Interviewee #28, the Native American female president of a trucking and excavating firm, stated that there is no difference performing the work in the public and the private sectors.

Interviewee #30, the Caucasian male co-owner of a transportation firm, reported no difference in working or attempting to get work in the public sector versus the private sector. Interviewee #30 reported that the profitability did not differ between private and public sector work.

Interviewee #33, the Caucasian male president of an engineering firm, stated that the profitability is about the same between the private and public sector. Interviewee #33 stated there is no difference in attempting to do work or actually performing the work in the public and private sectors. He stated, "It's about doing a good job and delivering the product on-schedule [and] in budget."

Interviewee #35, the Caucasian female vice president of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated that the profit margin is the same in the private and public sector.

Interviewee #38, the Native American female president of an engineering firm, stated that attempting to get work is the same in the public or private sectors. Interviewee #38 reported experiencing no difference when attempting to get work in the public sector compared to the private sector. She stated that the profitability does not differ based on one sector over the other, but she noted that the profitability differs by project type.

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that actually performing the work does not differ between the public and private sector projects. She reported that performing the work depends primarily on the specific job and not dependent on which sector the work is performed.

Interviewee #41, the Hispanic male owner of a DBE-certified trucking firm, stated that all work requires the firm to submit bids and price quotes to prime contractors, so there is no difference in attempting to get work in the public sector over the private sector.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, reported that in both the public and private sectors, firms get work by pulling the lettings and submitting bids. She added that in both the public and private sectors the firm also talks to prime contractors regarding upcoming projects. She stated that there is no substantial difference in performing the work in the public or private sector or in the profit margin in the private sector projects versus the public sector.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated actually performing the work does not differ between the public and private sector projects. Interviewee #43 reported that performing the work depends primarily on the specific job and is not dependent upon the sector in which the work is performed.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that actually performing the work does not differ between the public and private sector projects. Interviewee #44 reported that performing the work depends on the specifications for each project.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that there is no difference performing the work in one sector over the other.

Interviewee #47, the Caucasian female president of a WBE-certified trucking company, stated that there is no real difference in trying to get work in the private and public sectors. He stated that the profitability is about the same in the public and private sector.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated there is no difference with regard to contract performance on private versus public sector work.

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that actually performing the work generally presents the same difficulties in the private and public sectors.

IV. Oklahoma DOT.

Experiences in general.

Some interviewees reported a positive experience performing work for ODOT. [Interviewees #: 3, 4, 9, 14, 16, 17, 18, 19, 20, 22, 25, 27, 37, 40, 48, TA #1, TA #4, TA #5]. Interviewee #3, the Caucasian male president of a civil engineering firm, stated that he has worked with ODOT for over 25 years, and recently he has had "very positive things to say about ODOT ... that is why we work with them today." He stated that the varied work his firm performed for ODOT helped his firm develop professionally. He said that his firm has learned to work with ODOT, but it could "be hard for new companies to start up." He stated that it is easier to work with ODOT than it is to work with the federal government.

Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, reported that his firm has worked for ODOT as both a prime and a subcontractor. He stated that the process of working with ODOT is a little more detailed, but his firm understands the process so it is not

difficult. He reported that ODOT has implemented a program within the last month where a woman with ODOT will contact him and other DBEs when a project is coming up for bid. He said that he likes this a lot because he feels as though ODOT is considering his firm. He reported that he has never received any bad treatment from ODOT and, in fact, ODOT has tried to help his firm.

Interviewee #9, the African American owner of a non-certified trucking company, reported that he had a smooth experience working for ODOT.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, stated that he participated in the ODOT short-term lending program, and he found that program to be very useful to his business.

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, said of working with ODOT, "I won't say it was difficult." He stated that ODOT has "different criteria to perform the jobs, and as long as you do it according to their requirements and according to their standards, it's not difficult. If you don't know those standards, it's very difficult. In my case, it was not difficult."

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that "for the most part, [ODOT has] good people, they are good to work with."

Interviewee #18, the Caucasian male treasurer of a Caucasian male-owned heavy paving and grading construction firm, said that the firm usually performs paving work for ODOT as a prime contractor and that the firm sees itself "as a partner with ODOT."

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned bridge design engineering firm, characterized their work experience with ODOT as "good," but stated that it had not done work directly with ODOT since 2003. He reported that on one project in 2003 there were some issues with the scope of work and the length of the project being different than what was described in the project, but in all, it was a good experience.

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, said that when the firm works directly for ODOT, they are great to work with. He reported that it can be difficult to work with outside engineering firms.

Interviewee #22, the Caucasian male owner of a non-certified aerial mapping firm, stated that his experience actually working with ODOT has been very good. He also reported that they set deadlines and were straightforward.

Interviewee #25, the Hispanic male owner of a DBE-certified construction firm, stated that all the projects he worked on for ODOT were highway work. He said that he always goes through a prime, but ODOT has been pretty good. He said that his work experience with ODOT was fine with no real issues.

Interviewee #27, the Caucasian female owner of a DBE-certified erosion control firm, stated that working with ODOT has been a good experience after the certification was achieved.

Interviewee #37, the African American male owner of an engineering firm, stated that when he has successfully secured jobs with ODOT the experience has been good.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that it is relatively easy to perform work on ODOT projects as a subcontractor.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, said that his members' experience working with ODOT is "good with a capital 'G." He said that ODOT has "complex multi-million dollar projects, and you are always going to have a concern or two here and there, but this agency listens and responds to them. They are a wonderful partner." He reported that in terms of his members' experiences working with other public sector agencies, "ODOT is the best out there."

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, said the organization's members have had generally good experiences completing work for ODOT. He stated that his members have only engaged in a few projects as primes, and two turned out well, and one turned out badly. He said, "On the subcontracting work, most of the people feel pretty positive."

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that his clients generally reported good experiences actually performing work for ODOT.

Some interviewees reported negative experiences performing work for ODOT. [Interviewees #: 3, 5, 10, 22, 35, 37, 39, TA #3, TA #5, TA #7]. Interviewee #5, the Caucasian male co-owner of a geotechnical engineering firm, said that "a certain type of work" is available with ODOT. He added, "All they have is, basically, roads and bridges, and in the private sector, there's … different types of work." He said that it is easier to perform work in the private sector because when "you work for ODOT, there's always somebody who doesn't like what you've done." He said that someone always wants you to do something differently or to do something over. He reported that he "started working with ODOT back in the late '70s." He said that he no longer tries to do work with ODOT. He reported that he stopped trying to do work with ODOT about a year ago because of problems with payment and having to do work over again.

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, reported that it was generally harder to work with ODOT compared to other public sector work because of the residencies (resident engineers) with whom they were working. He added, "Some of the residencies were incredibility professional. They were knowledgeable, easy to give reports to; they didn't lose the documentation," but he said that some residencies lost documentation and were difficult to communicate with. However, he said that working with the inspectors and general contractors on site was no problem.

Interviewee #22, the Caucasian male owner of a non-certified aerial mapping firm, stated that he quit working as a subcontractor for ODOT because of the paperwork and financial requirements that were implemented. He stated the only way he would be happy to work for ODOT as a consultant would be "doing a lump sum fee." He stated, "After about two weeks of working through the paperwork I told ODOT to take me off the list."

Interviewee #24, the Caucasian male owner of a utilities construction firm, stated that "dealing with ODOT inspectors usually makes things more difficult." Interviewee #24 stated that inspectors and engineers "make planning mistakes that they try to blame on the [contractors] doing all the work." He said that from what he has heard from others in the industry, "I question whether it's even worth it to try to deal with ODOT."

Interviewee #35, the African American accountant of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry stated that relative to other public sector work, working with ODOT is more complex because they require certified payrolls, a submission of quantities every two weeks, and there is more paperwork involved.

Interviewee #37, the African American male owner of a DBE-certified engineering firm, stated that his most recent projects with ODOT were ADA sidewalk-improvement projects. Interviewee #37 stated that overall it was a good experience; however, the bad portion was that there were very specific requirements for the drawings and engineering that are not typical, and you would never know it unless you worked for ODOT. He said it was harder working on ODOT projects because ODOT has specific ways they want things done that are not clearly transmitted and you have to figure it out by turning in the work only to have to make several revisions. He stated that they were required to turn in submittals multiple times. He commented that ODOT could probably do more to provide assistance on the learning curve so you can understand what and how they want things done. He said that he spent a lot of time reprinting, re-plotting and delivering drawings after being told things were not correct.

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that the firm has had several projects with ODOT. She reported that recently the firm completed a project that was relatively small, but because the firm was not as familiar with ODOT procedures and expectations, the project required quite a bit of administrative management time. She reported that a new contractor who has never worked with ODOT before will be unfamiliar with the processes and will not know what to expect, particularly regarding pay estimates and the paperwork associated with the use of DBE firms. She stated that many of the ODOT staff do not seem to realize that some contractors may not be familiar with the ODOT processes.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that the bank's clients have reported that working with ODOT is much harder than working with other public entities because there are "more layers of inspections," which can delay the process.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that the only issue he is aware of involves the inspection process which requires particular portions of work be approved prior to invoicing. He stated, "Inspectors need to complete their work so that subs and prime can get paid."

Interviewee TA #7, the director of an organization that provides assistance to small businesses, said that her clients have primarily been second-tier subcontractors on ODOT work. She said that relative to other public sector work, ODOT was harder to work with. She stated that the scope of the projects is too large for small businesses.

Some interviewees reported that working with ODOT was similar to working on other public sector work. [Interviewees #: 1, 3, 9, 10, 32, 34, 47]. Interviewee #1, the Caucasian male chief financial officer of a Caucasian male-owned heavy highway and bridge construction firm, stated that their work experience with ODOT has been "fine." He stated that working with ODOT is about the same as working with other public sector entities. He said that some inspectors are easier to work with than others.

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, said that his firm has worked for ODOT on bridge and road projects. Interviewee #10 said that working for ODOT created "no more headaches than ... any other project."

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that the firm has previously worked on bridge rehabilitation and redecking projects for ODOT. She reported that actually performing work with ODOT is no harder or easier than other public sector work.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm, said that he has performed trucking and hauling work and excavating work for ODOT. He stated that relative to other public sector work, working with ODOT was the same.

Interviewee #47, the Caucasian female president of a WBE-certified trucking company, stated that relative to other public sector work it was no harder working on ODOT projects than other public projects. She stated that it does not matter if it is a City of Tulsa project or ODOT, the contractors and their people dictate if a project is hard or not. She stated that any problems that she has encountered with projects are based on individual personalities of superintendants. She stated that sometimes she experiences problems because she is a woman.

Some interviewees reported limited to no experience working with ODOT due to challenges in securing work with ODOT. [Interviewees #: 11. 23, 37, 38, 44, 46, TA #2, TA #3, TA #7, TA #8, TA #9, TA #10]. Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, said that the company has never done any jobs for ODOT. However, he said that the company is certified for ODOT. He added that the company has responded to invitations to bid, but it never received an offer back. He said that he has called and talked with representatives from ODOT, but that has not made a difference in terms of getting work with ODOT. He commented that he thinks that he is getting the run-around from ODOT. He said that the federal government requires ODOT to solicit minority and women-owned contractors in order to receive stimulus money, but he does not think that ODOT intends to give these contractors the job. He commented that good faith efforts seem to be a joke and that the companies call and ask if you have intentions on bidding. He said that he responds that he does, and the letting goes out, but he has not even had time to look at the plans by the deadline. He said that most of his contractors that work with him feel the same way. Interviewee #11 reported that ODOT has a list that is posted after bidding has closed that lists the bids from highest to lowest. He said that sometimes the winning bid is up to \$100,000 less than his bid, and he does not know how they can bid so low. He indicated that he suspects bid manipulation.

Interviewee #23, the African American male owner of a DBE/SDBE/MBE-certified security, construction, and food service firm, reported that his firm has attempted to get work with ODOT as a prime more than 20 times for construction, paving, guardrail fencing, concrete, and security

camera installation over the last three to four years. Interviewee #23 further stated that "none [of those attempts] resulted in any work for his firm." He stated that his firm has also bid as a subcontractor to work with ODOT several times and has yet to receive any contracts. He stated that he has not gotten work with ODOT because "they are setting the goals for set-asides but not enforcing them — they don't require the primes to have subcontracting plans in place." He further stated, "There is no follow-up on the part of ODOT."

Interviewee #37, the African American male owner of an engineering firm, stated that he has attempted and worked for ODOT in the past. He said that attempting to get work with ODOT is pretty difficult because most of their work is civil roads and bridges. He said that in order for his firm to get work, he has to have the support of someone who will oversee the civil work. He said, "Generally speaking, I don't even go after work with ODOT unless I have some support at a high level and feel like they are willing to do business with me." He stated that he does not feel like attempting to work in response to blind solicitations would be worth the time. He stated that this conclusion is based on the selection process which boils down to people and their perceptions of who is best for the project. He stated, "If people let me know that there is something they want me to work on, then I'll go after it. Otherwise, your name goes into a pool of companies that are 10 times bigger and have 20 times more projects and you're just not going to come out on the right end of that. I used to fill out a lot of RFPs when I first started out and never got selected, so I said there has got to be another way to get work."

Interviewee #38, the Native American female president of an engineering firm, stated that the firm has attempted to work with ODOT but has never actually worked on ODOT projects. She stated that a big problem in the selection process is that firms get points for having performed work for ODOT in the past. She stated prior experience is a problem for small firms because if a firm cannot get any work with ODOT, that firm is already at a deficit going into the selection process. She stated that this system permits those that are getting all of the work from ODOT to continue to get all the work from ODOT.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that the company has done ODOT work in the past but added "it is almost impossible as [an African American] firm to get work from ODOT." He stated that those projects that may be awarded to MBE firms are usually not very profitable, undesirable jobs, and require a bonding so high that MBE firms cannot afford the bonding.

Interviewee #46, the African American male owner of a DBE-certified safety and environmental consulting firm, stated that he has not completed any project for ODOT. He stated that when he started the business full-time in 1998, ODOT was one of the public agencies that he marketed to aggressively. He stated that he was introduced to about four key managers but nothing every developed. Interviewee #46 stated he received only one solicitation and submitted a letter of intent as a joint venture with another minority firm. He stated that after the selection process he requested a debriefing to find out the status of his credentials to enhance his proposal for future projects. He stated that he met with three ODOT representatives and felt good after the meeting but no contracts ever resulted. Interviewee #46 stated that he never received another solicitation from ODOT for professional services.

Interviewee TA #2, the executive director of a Hispanic trade association, reported that he believes that some of the organization's members have contacted ODOT, but he was "not aware of anybody being able" to do any work with ODOT. He said that the members are bidding as construction subcontractors on these projects. He added that the members' attempts to work with ODOT so far have not been very successful.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that the bank's customers do work with ODOT, and they are "always trying to get work through ODOT." However, he said that he understands that engineering projects are not competitively bid, so it seems as though one engineering company has historically gotten all of that work.

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that her clients have worked with ODOT only because of the MBE/DBE application process, but none of them have worked directly with ODOT or obtained an actual contract with ODOT. Interviewee TA #7 indicated that her clients typically perform work in the following areas: guard rail, landscaping, hauling, concrete, aggregates, line striping, engineering, consulting, advertising and technology. Her clients mainly bid as subcontractors because they are unsure if they have the capability to handle a job as a prime contractor.

Interviewee TA #8, a program coordinator and a special program consultant for a minority trucking cooperative, stated that most members of the cooperative do not try to get work with ODOT because of apathy. Interviewee TA #8 stated that the cooperative members have the attitude of "why even try?" because in the past they have tried and have not gotten work. Interviewee TA #8 reported that the truckers believe that they have not gotten work because of racial discrimination.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that his clients reported that they have only experienced a couple of incidents of MBE firms receiving projects from ODOT. He stated that statistically African Americans and Hispanics have gotten less than 1 percent of work through ODOT. He stated that based on his information there are not many MBE firms working for ODOT or attempting to get work with ODOT. He stated that his clients report that they were motivated to get certified but had no positive results. He stated that after a period of bidding the MBE firms stopped pursuing those opportunities because of the amount of time required to bid and pursue work with no positive results. He stated that another problem firms experienced was that so many of the ODOT projects were so large that the MBE firms could not get the required bonding and therefore could not secure work with ODOT.

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that the hardest part about working with ODOT is actually getting an opportunity to secure the work with the prime contractors.

Some interviewees reported having limited to no experience pursuing work with ODOT. [Interviewees #: 12, 24, 26, 28, 29, 30, 31, 41]. Interviewee #12, the owner of a female-owned non-certified civil engineering and land surveying firm, said that he has never had direct contract with ODOT, but he said that he has performed county and city projects that received funding from ODOT. He said that the contractors on those jobs were contracted through the county or the city and that he had no experience bidding with ODOT.

Interviewee #24, the Caucasian male owner of a utilities construction firm, stated that he has no experience trying to get work with ODOT. Interviewee #24 reports "I have never tried to get work with ODOT — I know the bidding process is different and I'm not even sure how to go about it." He stated that some of his utility construction work for municipalities and towns is actually funded by ODOT, but all bidding was done through the city and town engineers.

Interviewee #26, a supervising manager of a Caucasian-owned construction firm, stated that he had no direct experience either bidding with or working for ODOT.

Interviewee #28, the Native American female president of a trucking and excavating firm, stated that the firm has never worked for ODOT and only attempted to work on one ODOT project. Interviewee #28 stated that a prime contractor contacted the firm and asked for a bid, but the project was put on hold so the firm never actually submitted a bid.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that he has not attempted to work for nor performed work with ODOT. He reported that he just recently become DBE certified by ODOT.

Interviewee #30, the Caucasian male co-owner of a transportation firm, stated that he has not attempted to work for nor ever performed work with ODOT.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated that the firm's asphalt plant was recently approved by the State of Oklahoma, which allowed the firm to begin to sell asphalt materials directly to the State. However, Interviewee #31 stated that other than selling to the State of Oklahoma, the firm has not worked for ODOT and has not tried to work for ODOT.

Interviewee #41, the Hispanic male owner of a DBE-certified trucking firm, reported that he is not aware of bid lettings offered by ODOT and that he does not think that the firm has ever gotten any work on ODOT projects.

Notification of work opportunities.

Some interviewees indicated that ODOT has good notification procedures in place to notify individuals of opportunities to bid. [Interviewees #: 1, 2, 3, 6, 9, 10, 13, 14, 15, 16, 17, 18, 19, 21, 22, 25, 34, 35, 36, 37, 45, 48, TA #1, TA #3, TA #4, TA #5]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, said that learning about ODOT projects is "relatively easy [and] has never been a problem."

Interviewee #3, the Caucasian male president of a civil engineering firm, said that it is easy to find out about ODOT work and stated that a firm needs to send a letter to ODOT stating that it is interested in working with them, and then the firm will receive mailings from ODOT regarding work opportunities.

Interviewee #6, the African American owner of a DBE-certified trucking company, said that he gets work with ODOT through primes. He said that he works on road, highway, and bridge construction. He said that he is a member of AGC, so he finds work easily "with both the City and the State." He stated that finding out about work is "not difficult at all."

Interviewee #9, the African American owner of a non-certified trucking company, said that he submitted approximately seven or eight bids to ODOT in 2009. He indicated that he bid on these projects as a subcontractor. He said that it was "pretty easy to find out" about the ODOT projects on the Internet.

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, said that it was easy to check online for ODOT work opportunities. He added, "We have no problem finding out what their projects are, ... and we've been able to submit the qualifications and experience stuff on the engineering side without any trouble. They're quite good about getting that information out. On the engineering side, they actually e-mail it to us; we just never get anywhere with it."

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, said that it was "easy" to find out about work with ODOT. He stated, "They sent me e-mails."

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, said that it has been about 15 years since he was active in ODOT contracting. He said that he worked on roads and bridges, concrete restoration specialties, and concrete demolition. He said that he completed all of this work as a subcontractor. He reported that at the time when he did ODOT work, it was easier to find out about ODOT work than other public sector work, because there was a good system of notification made available by ODOT as well as other prime contractors who would provide notification and still do.

Interviewee #15, the Caucasian male co-owner and manager of an engineering firm, noted that it was "relatively easy" to find out about ODOT opportunities. He said that he did not know how this compared with other public sector work.

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, commented that ODOT has "improved tremendously." He said that ODOT's notification and RFP process "is now by electronic files, so it's easy."

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that ODOT's notification process "is good," and they find work opportunities on ODOT's website.

Interviewee #18, the Caucasian male treasurer of a Caucasian male-owned heavy paving and grading construction firm, stated that he believes it is easier to obtain work with ODOT relative to other work because the system is very open to people to find out about upcoming work. He reported that it is published electronically.

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned bridge design engineering firm, said that relative to other public sector work, ODOT opportunities are very easy to find out about. He stated that the company receives notices via e-mail and that all relevant information is publicly available.

Interviewee #21, the Caucasian male general manager of a Caucasian male-owned bridge construction firm, said that relative to other public sector work, ODOT work opportunities are easier to find out about.

Interviewee #22, the Caucasian male owner of a non-certified aerial mapping firm, stated that he did not have difficulty finding opportunities with public agencies or ODOT in particular. He stated "they call me [because] I am on the list [of contractors] ... they send me information to submit qualifications."

Interviewee #25, the Hispanic male owner of a DBE-certified construction firm, stated that he has never noticed any difficulty finding out about ODOT's bid opportunities. He said "the primes seek us out, so we have never had any trouble."

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm stated that relative to other public work, it was easier to find out about ODOT work opportunities because the ODOT website is updated regularly. He stated that that the firm is listed as a prime contractor with ODOT under demolition. Interviewee #34 stated that ODOT automatically sends him a bid packet for any projects under \$50,000; for projects over \$50,000 he is required to review the posted bid lettings from the ODOT website.

Interviewee #35, the Native American female president of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated that relative to other public sector work, it was easier finding out about ODOT work opportunities because the process has never changed and the information is available on ODOT's website, which the firm visits frequently.

Interviewee #36, a Caucasian female senior engineer of an engineering firm, stated that ODOT is helpful in that they typically have quarterly solicitations that come out for consulting projects and those are e-mailed directly to the firm and are also available online. She said that relative to other public work, it was easier to find out about ODOT's work opportunities because ODOT sends out solicitations directly to the firm.

Interviewee #37, the African American male owner of a DBE-certified engineering firm, stated that ODOT is now e-mailing solicitations and he feels that is sufficient to find out about work opportunities. He stated that it is easier to find out about ODOT work opportunities because they are required to post everything and you can view it online.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that relative to other public sector work it was easier finding out about ODOT's work opportunities. He stated that the firm is familiar with the ODOT process so it works well for them.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, said "there are a lot of opportunities to work with ODOT and a lot of success [working with ODOT]." He said that obtaining work with ODOT is competitive. He said that it is easier to find out about work opportunities with ODOT as opposed to other public agencies because ODOT is "organized and functional" and has a long-term plan. He reported that ODOT advertises work opportunities on its website and in trade association journals. He said that his association works with ODOT to advertise work opportunities. Interviewee TA #1 explained that his trade association has a "90 percent penetration rate in the

State," meaning that of all of the contractors that work with ODOT, 90 percent of them are members of his organization. He said that he believes that advertising ODOT project opportunities through his trade association's magazine is very effective.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, stated that it is easier to find out about ODOT work than work at other public entities. He added that this is because they have to make it publicly known, and other public entities do not provide the same access and details.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, said that after meeting with ODOT concerning the bidding process last year and going through the process himself to see how it worked, he thought that "they do a really good job as far as notification, what's available, what is required in order to put together a proposal.... We believe the problem is that we have companies that are afraid to pull the trigger because they're afraid that once they put that bid price in and they're locked into it that they're on the hook.... We hope that we might be able to provide assistance [concerning] the actual bid price.... I have found that that is one of the number one reasons that people don't actually pull the trigger as far as actually submitting it."

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that finding out about ODOT opportunities was easier than other public sector work because of ODOT's website, which lists the certified primes and DBEs.

Some interviewees reported challenges in connection with learning of opportunities to bid with ODOT. [Interviewees #: 4, 20, 32, 47, TA #2, TA #6, TA #7, TA #9, TA #10]. Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that it is more difficult for him to find out about opportunities to bid with ODOT as a prime contractor as opposed to other public sector work because he is not certified as a prime contractor with ODOT. He reported that he learns of opportunities to bid on ODOT projects as a subcontractor through solicitation calls from prime contractors. He reported that he receives lists of available projects for other cities throughout the State.

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, said that his company has performed work with ODOT as a utility contractor and that his company usually bids as a subcontractor. He said that it is harder to learn about ODOT work opportunities because ODOT "does not publish" opportunities. He added that, instead, bidders need to drive to Oklahoma City to obtain plans, and ODOT has been slow to adopt electronic plan distribution.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that she would recommend or suggest to ODOT that they have the plans and jobs posted sooner on the website in order to allow interested firms additional time to prepare, solicit, and submit bids.

Interviewee #47, the Caucasian female president of a WBE-certified trucking company, stated that relative to other public sector work it was harder finding out about ODOT's work opportunities because of the lack of communication. She stated that she does not visit the ODOT website.

Interviewee TA #2, the executive director of a Hispanic trade association, said that ODOT should reach out more to the communities and have a bigger presence within the Latino community. He reported that ODOT has hired one woman that has come to give them information, but he said that he thinks that ODOT needs to do more.

Interviewee TA #6, the president of a minority business development agency, reported that relative to other public sector work, it was harder to learn about ODOT opportunities.

Interviewee TA #7, the director of an organization that provides assistance to small businesses, reported that relative to other public sector work, it is harder to find out about and to obtain work on ODOT projects, noting that several of her clients regularly get Air Force and Army contracts but have never had a contract for work with ODOT.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that relative to other public sector work it was harder to find out about ODOT work opportunities. He stated that his clients reported that they were not being contacted by the prime contractors although they are on the certified DBE list. He stated that his clients reported having to spend a lot of time marketing and seeking out prime contractors.

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that relative to other public sector work it was harder to find out about subcontracting opportunities available with ODOT.

Some interviewees indicated that ODOT's notification procedures for work opportunities are about the same as other agencies' procedures. [Interviewees #: 1, 15, 33, 40, 42, 43, 44, 46, TA #8]. Interviewee #1, the Caucasian male chief financial officer of a Caucasian male-owned heavy highway and bridge construction firm, stated that as long as you know what to do, it is not difficult to find out about work opportunities with ODOT. He said that relative to other public entities, ODOT's bid process is about the same, and "a bid is a bid." He stated that the requirements are outlined and the process is self-explanatory.

Interviewee #33, the Caucasian male president of an engineering firm, stated that relative to other public sector work, it is no easier or harder to find out about ODOT's work opportunities because if you are on the list of prequalified contractors, you receive notices about opportunities.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that relative to other public sector work, finding out about ODOT work opportunities was no harder or easier than finding out about work with other agencies.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, said that that the firm has attempted to work with ODOT and has performed work on ODOT projects. She reported that the firm pulled the ODOT lettings, submitted bids to prime contractors to perform dirt work, and performed on ODOT projects as a subcontractor. She stated that that relative to other public sector work, finding out about ODOT work opportunities was no harder or easier.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that relative to other

public sector work, finding out about ODOT work opportunities is the same. Interviewee #43 stated that DBE subcontractors are contacted by the prime contractors and prime contractors routinely solicit the firm by fax regarding bid opportunities.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that relative to other public work, it was no easier or harder to find out about ODOT work opportunities. He stated that it is not difficult to find out about projects, but it is hard to get the projects.

Interviewee #46, the African American male owner of a DBE-certified safety and environmental consulting firm, stated that finding out about ODOT work opportunities was no harder than other public sector work. However, he stated that a solicitation came out in March containing eight projects and two were environmental projects his firm could perform. He stated that he did not receive any notification. He stated that he only found out about the work opportunity because another small environmental firm that he had teamed up with in the past e-mailed him the package to inquire if he was interested in working on the project. He stated that he immediately contacted ODOT to find out why he did not receive the solicitation notification. Interviewee #46 stated that ODOT responded that there was some mix-up in the process, but assured him he was on the list and would receive future notifications.

Some interviewees indicated that ODOT's notification procedures were different than other public agencies' procedures. [Interviewees #: 5, 7, 19]. Interviewee #5, the Caucasian male co-owner of a geotechnical engineering firm, stated that he learned of projects through notices that ODOT sent out concerning its projects. He said that this is different from the process used by other agencies, such as the City, which has people on contract to which it can assign work.

Interviewee #7, the Native American owner of a federally-certified aerospace firm, reported that finding out about ODOT work is not as easy as finding out about federal work, but it is easier than finding out about work from other State agencies. He added that ODOT has a website that posts opportunities, but the federal level work is "really broken down by agencies and competencies." He also noted that there is a service with which his company has registered its competencies and that will notify the company of federal opportunities.

Bidding process.

Some interviewees reported positive experiences with ODOT's bidding process. [Interviewees #: 2, 3, 6, 9, 10, 13, 14, 16, 17, 18, 21, 27, 32, 33, 34, 35, 36, 37, 39, TA #1, TA #4]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, said that ODOT's bid process "is pretty easy ... no problems there."

Interviewee #3, the Caucasian male president of a civil engineering firm, said that ODOT's RFP process is "consistent and has improved vastly over the last couple of years." He said, "They do have a process, and it seems to work well, and ... it is probably better than some of the other agencies that we work with."

Interviewee #6, the African American owner of a DBE-certified trucking company, said that ODOT's bidding process is "pretty straightforward."

Interviewee #9, the African American owner of a non-certified trucking company, reported that ODOT's bid process was "pretty easy."

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, said that ODOT's bidding process was easy for the work he performed as a subcontractor and involved a simple letter proposal with a lump sum quotation because of the very specific scope of work.

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, reported that he is currently working for ODOT as a prime on a state highway project. He said that he responded to a request for a proposal, was interviewed, made a presentation, and was selected to do the project.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, reported that the bidding process was easier with ODOT than with other public sector work because he was a specialty contractor, so the scope of his work was more limited.

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, stated that ODOT has "improved tremendously." He said that ODOT's notification and RFP process "is now by electronic files, so it's easy."

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that ODOT's bid process is "pretty easy," adding, "you download the documents, they email you the plans, you put your bid together and submit it over the Internet; it is not complicated."

Interviewee #18, the Caucasian male treasurer of a Caucasian male-owned heavy paving and grading construction firm, said that the ODOT's bidding process is "probably easier" than other public sector work because they have moved towards electronic bidding.

Interviewee #21, the Caucasian male general manager of a Caucasian male-owned bridge construction firm, said that relative to other public sector work, ODOT's bid process is easy, citing electronic bidding as the reason.

Interviewee #27, the Caucasian female owner of a DBE-certified erosion control firm, reported that the "bid process is actually very good." She stated that getting work with ODOT is much easier than getting other public sector work. She stated "ODOT is just a much easier bid process."

Interviewee #33, the Caucasian male president of an engineering firm, stated that relative to other public sector work, the bid process was easier with ODOT because ODOT requires pregualification, and his qualifications are on file with ODOT.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm stated that he was pleased with ODOT's bid process.

Interviewee #35, the Native American female president of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated that relative to other public sector work, ODOT's bid process is easier.

Interviewee #36, a Caucasian female senior engineer of an engineering firm, stated that relative to other public sector work, ODOT's solicitation response process was easier because the requirements are made clear, you submit the forms and, if you make the short list, make a presentation. She stated that you get accustomed to filling out the forms, which average approximately 10 pages, versus other public sector work that requires much larger submittals and the forms are just a very small portion. She commented that the solicitation response process with ODOT was straightforward and easier relative to other public sector work. She stated, "We found [the bid process] pretty easy to work within the system."

Interviewee #37, the African American male owner of a DBE-certified engineering firm, stated that the bidding process was easier because the interviews were set up quickly, decisions were made quickly, the ODOT staff let you know the question that would be asked and what to be prepared for.

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that relative to other public sector work, the ODOT bid process was easier because of the electronic bidding capability.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, said that ODOT's bid process is "public ... the rules are out there, and there has never been anything ambiguous. The guys know what is expected." He said it is effective.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, stated that one of the organization's members has had a hard time with the bidding process and performing work for the Department of Transportation, but "the two other entities that we have that have done work with the Department of Transportation, ... seem to [have] thought [that] the process was pretty transparent, open, and didn't have a problem with it at all." He said that the ODOT bidding process is "the easiest" when compared to other agencies' bidding process for professional services in Oklahoma, "but [for] anything that requires construction ... the ODOT process ... seems comparable."

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that the major problems working with or attempting to work with ODOT were centered more on certification issues as opposed to getting work. He stated, "Once certified, our clients have had relative success getting projects." He stated that he perceived the bid process to be transparent, open and relatively easy.

Some interviewees reported challenges in connection with ODOT's bidding process. [Interviewees #: 2, 3, 10, 14, 16, 19, 20, 40, 47, 48, TA #4, TA #6, TA #7]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, reported that he has been bidding with ODOT for two years and has not been successful. He said, "Why? ... I wish I knew the answer to that." He said that he has bid "not less than seven or eight projects every month." Interviewee #2 stated that he always bids the projects as a subcontractor and, initially, he goes after

the contracts with DBE goals "because I feel like that should be more of an advantage for me than the ones that don't have goals on them"; however, he has not been successful.

Interviewee #3, the Caucasian male president of a civil engineering firm, said that ODOT's RFP process is "a bit lengthy" between the timing of the RFP and placement on the short list.

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, said "We've been in business ... somewhere around a decade, and we went down and interviewed for the geotechnical contract ... four times. We've been shortlisted for interviews every time, and we generally land right in the middle, one or two below wherever they stop the selection.... There's been other contracts that we went down there and interviewed for, and in general, they've always told us that we were either too small, don't have enough equipment, don't have enough experienced engineers ... but just in general [they] haven't been inclined to give us the contract, and here in the state they always go back to the older firms, the established firms that have been here 50 or 60 years." He said that one thing that has changed in the last eight years is that they have let national firms on the contracts. He mentioned that the firm considered applying to work on a concrete inspection contract, but "the same firm has been on that contract so long now that no one will apply for it anymore, they just won't waste their time. The last time it came around, I took a look at it and said, 'I'm not going to bother it'" because they know ODOT will award the same firm the contract. Interviewee #10 said that this is frustrating because they work so hard for the presentation, and they are shortlisted, but nothing happens. He reported working under general contractors on some ODOT projects. He stated, "In general, the contractors didn't hire us because we're minority status; they hired us because we took care of them." He commented that on ODOT's engineering side, "they seem to take forever to make a decision on who they're going to shortlist, and then they even take longer to actually negotiate contracts." He said that it "makes it very hard to plan your staffing needs and what projects your engineers are going to work on if they delay contract awards."

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, explained that a problem that he experienced as a DBE was the tremendous capital requirements associated with performing ODOT work. He reported that his experience with general contracting has been much more favorable because it inherently involves much more administration and project management, and it lends itself to facilitating the work through the use of subcontractors, who bring their own capital to perform the work. He also noted that building construction is a little less capital-intensive than facility work for ODOT.

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, said that the RFP response process was "different," and not better or worse than the process with other agencies. He noted, "You need to know their system to respond to them."

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned bridge design engineering firm, said that the bid process is only harder with ODOT insofar as negotiation is more time-consuming.

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, said that relative to other public sector work, ODOT's bid process is harder because the agency "does not facilitate questions well."

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that the only problem is that ODOT does not accept lump sum pricing anymore and requires a detailed breakdown of tasks, mileage, labor, and requires that the firm justify overhead. He added that because his firm has kept its overhead low, the firm is punished when it comes to justifying overhead costs.

Interviewee #47, the Caucasian female president of a WBE-certified trucking company, stated that the ODOT bid process is harder relative to other public sector work because of the lack of communication from ODOT. She stated that the City of Tulsa sends her bid sheets regularly.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that ODOT's bid process is harder relative to other public sector work because the ODOT bid process is more stringent and requires a lot of paperwork.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, reported that "there is some frustration among the professionals that do engineering and architectural work as far as getting work. I think part of it is that most of them either have just established or have small entities, and it appears ... that DOT really likes to go with more established entities in doing that kind of work."

Interviewee TA #6, the president of a minority business development agency, stated that his clients have attempted to get work with ODOT, but the efforts were "futile." Interviewee TA #6 stated that his clients were going after concrete work bidding as a subcontractor. He stated that one firm got certified, looked at the bid letting, went to the pre-bid meeting, and sent information to the primes, but they never received information or feedback from any prime. He stated that the certified DBE firm never tried again to participate in the ODOT bid process. Interviewee TA #6 stated that he was not aware of any of his clients actually having done work on ODOT projects. He indicated that ODOT's bid process was harder than the process associated with other public sector work. He stated that he was not certain why, but he said that he believed the "paperwork was overwhelming."

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that relative to other public sector, work ODOT's bid process is harder, noting that municipalities have better websites with more filtering capacity that are easier to navigate. She also noted that the costs are higher in bidding with ODOT because the bidder needs to purchase plans—it costs money to bid, and her clients have to submit several bids before they will ever get a contract.

Some interviewees reported that the bidding process at ODOT was similar to the bidding process at other agencies. [Interviewees #: 4, 5, 6, 15, 32, 33, 34, 37, 38, 40, 42, 43, 46, TA #3, TA #4, TA #8]. Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that bidding on ODOT projects is about the same as bidding on other projects.

Interviewee #5, the Caucasian male co-owner of a geotechnical engineering firm, said that he has no experience with the bidding process dealing with construction projects. However, he said that ODOT does have a formal process by which it selects a geotechnical engineer, and this process is "probably about the same" as that used by other entities.

Interviewee #15, the Caucasian male co-owner and manager of an engineering firm, reported that the documentation for ODOT was not out of the ordinary.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that the firm has worked with ODOT in the past. She stated that attempting to get work with ODOT is strictly a competitive bidding process. She stated that she reviews ODOT's bid list, which contains the engineers' estimates. Interviewee #32 stated that the firm then prepares a bid estimate and tries to beat the engineer's estimate in order to be competitive and submits a bid as the prime contractor or to the prime on the plan holders list. She stated that the bidding process with ODOT was no easier or harder relative to other public sector work. She stated that the notification and bid process with ODOT was good.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm stated that ODOT's bid process was the same as the bid process with other public sector agencies.

Interviewee #37, the African American male owner of a DBE-certified engineering firm, stated that the bid process with ODOT was the same as other public sector work.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that relative to other public sector work, ODOT's bid process was not necessarily any harder or easier.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that that relative to other public sector work, ODOT's bid process was no harder or easier.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, stated that when compared to other agencies' bidding process," anything that requires construction ... the ODOT process ... seems comparable."

Prequalification.

Some interviewees reported that ODOT requires prequalification. [Interviewees #: 18, 19, 21, 32, 34, 35, 39, 45, 47, 48, TA #1, TA #5, TA #9, TA #10]. Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that ODOT required prequalification as a prime contractor. She stated that they verified financial statements, reviewed a list of available equipment, and examined the firm's past work history.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that within ODOT, the prequalification for DBE firms is to be certified as a DBE and the prime contractors have to be prequalified as a prime, which takes a lot of assets and resources.

Some interviewees reported that ODOT does not require prequalification on some projects. [Interviewees #: 2, 3, 4, 5, 6, 9, 10, 13, 14, 16, 27, 40, 42, 44, 46]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, said that ODOT did not require prequalification for his firm.

Interviewee #3, the Caucasian male president of a civil engineering firm, said that he knows that his firm has to be on a list in order to respond to RFPs, but he did not believe or did not remember whether they had to be prequalified.

Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that, although ODOT generally requires pre-certification, ODOT is waiving certification and prequalification requirements for certain projects right now in order to give qualified DBEs the opportunity to participate.

Interviewee #5, the Caucasian male co-owner of a geotechnical engineering firm, indicated that his firm is not required to prequalify for work with ODOT.

Interviewee #6, the African American owner of a DBE-certified trucking company, reported that ODOT did not require him to prequalify.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, reported that he did not have to prequalify for ODOT work.

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, reported that ODOT did not require prequalification. He noted that at that time, they were selecting "contractors from central services," but he said that this is not the case anymore, adding, "The process has changed lately."

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that ODOT did not require prequalification for professional services firms.

Interviewee TA #6, the president of a minority business development agency, reported that she was not aware that ODOT required prequalification.

Some interviewees reported a positive or successful experience with the prequalification procedure. [Interviewees #: 1, 7, 17, TA #1, TA #4]. Interviewee #1, the Caucasian male chief financial officer of a Caucasian male-owned heavy highway and bridge construction firm, said that his firm is prequalified with ODOT.

Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that ODOT would provide stringent prequalification, "which is good."

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that his firm went through ODOT's prequalification process a couple of years ago, and it was not complicated.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, said the ODOT's prequalification process "seems to be fair, equitable [and] timely."

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, said that he was not aware of prequalification problems.

Some interviewees reported challenges in connection with the prequalification procedure. [Interviewees #: 10, 22, TA #3]. Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, stated "We paid a lot of money for training for the DOT." He added, "When we went down and talked to them ... they just said, 'No, this is not going to happen, and the main reason is because your record is Anglo," even though the reason that the company gets along so well with so many other contractors is that the company generally meets the contractor's minority requirements. Interviewee #10 said that ODOT engages in on-call contracts, which are two-year contracts with the potential to renew up to three times in some cases. Interviewee #10 said that "that's something I don't believe is right because if you're opening your business today and they just came out with a list last month, you cannot do business with them for the next two years. The doors are closed." He added, "We have a lot of clients that would love to use us, but ... they're looking for a DBE firm ... but the other thing that we're told constantly is 'Have you been approved by the DOT?' ... The assumption is that if you're not on that two-year contract, you're not approved ... to do DOT work." He said that the State has reciprocity, but you have to take the first available certification class." He said that classes are expensive too, but the most important problem is that the classes are not available, so if they get a job, then they cannot perform the job. He added that employees have to be trained by the DOT, but often companies must wait for more than a year to receive that training. He said that often the classes are full before they are published, so technicians cannot get certified.

Interviewee #22, the Caucasian male owner of a non-certified aerial mapping firm, stated that he "had to interview to be an on-call consultant, usually there [were] three people out of the ODOT survey division that handled the interview and talked about qualifications and experience." He stated that after 2008 he turned down this work. He reported that his reason for turning down the work as a consultant was because of the new policy requirements which included "making you go through an audit, wanting to know how much your hourly rate is of all your employees and your equipment and your overhead. I guess they want to do it on a cost-plus basis instead of just a lump sum." He also stated that he knows [a surveying firm] that turned down the on-call work from ODOT for the same reason. Interviewee #22 also reported that currently on-call work for ODOT is being performed mainly by "large companies that have a lot of employees." He stated that the issue of small businesses working for ODOT has been "talked about at the surveyor's conferences and that the small businesses have trouble working for ODOT because of their regulations."

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, stated that prequalification with ODOT is much harder than it is with other public entities "because they have a stern list of qualification issues" that you must meet, but the "private sector is less strenuous" and requires more relationship-building than anything.

ODOT staff and personnel.

Some interviewees reported a positive experience interacting with ODOT staff and personnel. [Interviewees #: 7, 15, 18, 25]. Interviewee #7, the Native American owner of a federally-certified aerospace firm, reported that he thought about working with ODOT "early on, and they were very helpful." He added that the company was "encouraged to get an ODOT certification because it could probably help us in certain areas of work, like in the Army Corps of Engineers for example,

but because we got so heavily involved in the aerospace industry, we moved further away from that." He said, "We found ODOT really helpful, but again it's matching competencies to needs."

Interviewee #15, the Caucasian male co-owner and manager of an engineering firm, reported that the firm has not yet worked with ODOT, but it has attempted to get work with ODOT. He said that that experience has been "totally pleasant. Anyone I talk to at ODOT ... they always [have a] pleasant voice, very good at getting right back with you if you do have to leave a message, and when they say they're going to e-mail something, it gets there, you're not a week out."

Interviewee #18, the Caucasian male treasurer of a Caucasian male-owned heavy paving and grading construction firm, said that the firm and ODOT have "mutual respect," and they know the people at ODOT well.

Interviewee #25, the Hispanic male owner of a DBE-certified construction firm, stated that ODOT inspectors and engineers were fine to work with.

Some interviewees reported challenges in connection with ODOT staff and personnel.

[Interviewees #: 35, 48, TA #8]. Interviewee #35, the Native American female president of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated the ease or difficulty in actually performing ODOT work depends largely on the prime and what county and district (ODOT Division) the projects are located in. She stated that the county and district in which the ODOT projects are located dictates which ODOT resident engineer office is responsible for the project. Some of the resident engineers are difficult to work with and some are easy to work with. She stated that the resident engineers do not always go by ODOT rules. She stated that there is no consistency with the residencies (ODOT Division Resident Engineers). She stated, "One residency may say it's okay for you to do this and the next one may say I don't ever want you to do that. There is no consistency." She said, regarding working with ODOT, "A lot depends on who you are and who you know, on what you can get by with and what you can't."

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that he has encountered ODOT resident engineers that are "eccentric" because they are behind the times in their knowledge of industry standards and practices. He reported that once when delivering a product, he spent days trying to educate the resident engineer that Oklahoma does not have an approved certified list of the acceptable quality level for the product and that it is the inspector's responsibility to inspect the product for approval. He stated that because of the delays caused by trying to educate the resident engineer, payment was delayed to the prime contractor.

Interviewee TA #8, a program coordinator and a special program consultant for a minority trucking cooperative reported that there is apprehension about working with ODOT. Interviewee TA #8 stated that members reported that, "It is about the institutional culture of [ODOT]." Interviewee TA #8 stated, "The institutional culture of ODOT has no interest in bringing solutions. They will only do what is required. They are not interested in doing cutting-edge programs to address complaints ... this is a part of [ODOT's] culture that goes back all the way 25 years."

Payments.

Some interviewees reported a positive or successful experience receiving payment on ODOT projects. [Interviewees #: 1, 3, 4, 9, 14, 16, 17, 18, 19, 21, 22, 25, 27, 32, 33, 34, 37, 39, 40, 44, 47, 48, TA #1, TA #4, TA #5]. Interviewee #1, the Caucasian male chief financial officer of a Caucasian male-owned heavy highway and bridge construction firm, said that obtaining payment from ODOT is far easier than other public sector work and noted that payment is done electronically. Interviewee #1 stated that he did not have any recommendations for ODOT to improve its administration of contracts or payment methods and noted that ODOT does a very good job at this.

Interviewee #3, the Caucasian male president of a civil engineering firm, said "we always get paid, [and] ... payment over this last year has been a lot better." He said that there are anomalies that will come up in any process and they have had some invoices outstanding for 300 days. He said that these days they are paid within 90 days, and they have really enjoyed their work with ODOT.

Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that his experience working with ODOT has not been difficult. He reported that he works directly with the City, and the City then works with ODOT. He stated that all that he has to do is his job; he reported that he then will submit his bill to the City and receive payment. He said that the City will pay him directly, and the City will then coordinate with ODOT. He stated that payment on ODOT projects occurs monthly, which he characterized as very good. However, he reported that payment by the City of Oklahoma is very slow right no, in excess of two months.

Interviewee #9, the African American owner of a non-certified trucking company, said that he was "paid on time."

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, said that he did not generally have problems getting paid for ODOT work.

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, said that payment is "generally ... good," though "once in a while there were some glitches."

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, said that aside from the change-order issue, ODOT pays regularly on the first and fifteenth of every month.

Interviewee #18, the Caucasian male treasurer of a Caucasian male-owned heavy paving and grading construction firm, said that processing of payments is very good and his company gets paid electronically within days of estimates. He noted that his company does not always get paid 100 percent of what is requested right away, but they "get paid most of it and very quickly." He said that relative to other public sector work, it is easier to get paid on ODOT work because the payments do not have to be approved by a council or group.

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned bridge design engineering firm, said that his experience getting paid for ODOT work is "pretty good, for the

most part," but there have been times when a payment "gets lost on a desk." He said that on those occasions ODOT is very responsive, and a single telephone call takes care of the problem.

Interviewee #21, the Caucasian male general manager of a Caucasian male-owned bridge construction firm, said that relative to other public sector work, it is easier to get paid on ODOT projects.

Interviewee #22, the Caucasian male owner of an aerial mapping firm, stated that payment was prompt: "as long as you expect 60-90 days, it is on time."

Interviewee #25, the Hispanic male owner of a DBE-certified construction firm, stated that the pay delays he has experienced have not usually been the fault of ODOT, but instead the prime is usually slow at disbursing the money.

Interviewee #27, the Caucasian female owner of a DBE-certified erosion control firm, declared that ODOT has a good track record of payment and is much better than other public and private sector work.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that getting paid on ODOT work is relatively easy compared to other public sector work, especially because of the option to enroll in direct deposit.

Interviewee #33, the Caucasian male president of an engineering firm, stated that getting paid on the ODOT project was good, and the payment process went smoothly and was timely. He stated that relative to other public sector work, the payment was about the same because most public sector work pays on schedule.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm, stated that relative to other public sector work, getting paid on ODOT's work was easier because the process is lined out. He stated, "The quantities and pay request are turned in, they check it out and you get paid in about three days."

Interviewee #37, the African American male owner of a DBE-certified engineering firm, stated that relative to other public sector work, the payment process with ODOT was very good. He noted that ODOT paid within 30 days.

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that getting paid on ODOT projects is excellent. She reported that ODOT paid faster than anyone else. She stated that the firm did not invoice ODOT, rather ODOT prepares the invoices based on percentage of completion in the field and processes payments on the 15th and 30th of each month. She stated that payment is received via wire transfer within 10-11 days after the completion estimates are entered. Interviewee #39 stated that receiving payment on ODOT projects was easier relative to other public sector work.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that the firm has never experienced any problems with timely payment on ODOT projects.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that getting paid on ODOT projects was good.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, said "for the vast majority of members, their [ODOT payment] experience is good. Every now and then . . . they will have payment situations on an individual basis [based on details that he is not aware of.]" He said that he has never had a subcontractor complain about not receiving payment. He also reported that relative to other public sector work, payment by ODOT is "great."

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, noted that the organization's members generally have not had problems getting paid on ODOT work with the exception of one company.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, reported that payment on ODOT projects generally appears to be easier than in other public sector work, but it is on a case-by-case basis.

Some interviewees reported negative experiences receiving payment on ODOT projects. [Interviewees #: 5, 10, 17, 19, 20, 24, 35, 36, 43, TA #3, TA #7]. Interviewee #5, the Caucasian male co-owner of a geotechnical engineering firm, said, "Of all of the governmental agencies, [ODOT is] the most difficult to deal with" because of untimely payment and having to redo work on projects. He added that he was consistently paid four to six months after completing the work. He said, "Generally, the other governmental agencies pay within 30 to 45 days."

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, said that they "have to wait for the payment until the general contractor is paid. So, that can be from 150 days to 200 days." She noted that sometimes the general contractor receives the money and does not pay the subcontractors, so the subcontractors are the last on the list to get paid. Interviewee #10 said, "The original specifications said that ODOT will pay this much" upon completion of different stages of the project. Interviewee #10 indicated that the law has changed but added, "The practice has not changed. As I understand [it], the ODOT is [not enforcing the new law]." Interviewee #10 said, "The contractors hold onto the money as long as they can in most cases," adding that they are paid, but it is very late.

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that his biggest complaint is that when they do change-order work, it takes too long to get paid. He stated that if ODOT does a change order, they will do it at the end of the job and want to pay you everything that you have done that is extra; that has to go to the division and the commission meetings to get approved, and that can sometimes be a three month process. He stated that he had had difficulty obtaining payment from a prime contractor on ODOT work and noted that it could take between 60 and 90 days to get paid by a prime.

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned bridge design engineering firm, said that relative to other public sector work, it is "slightly harder to get payment from ODOT."

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, said that relative to other public sector work, it is harder to get paid by ODOT. He said that there are always arguments about change of scope and that it can take almost a year before an engineer gets motivated to resolve a change-of-scope issue. He recommended that ODOT push its engineering firms to finish their work.

Interviewee #24, the Caucasian male owner of a utilities construction firm, stated that he has heard complaints from other companies and some municipalities depending on ODOT for funding about excessive delays in payment.

Interviewee #35, the African American accountant and Native American female president of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated that there is no problem getting paid as a prime with ODOT, but there are payment issues for subcontractors. Interviewee #35 stated that there are major issues with ODOT's payment process and ODOT following their own rules. She reported that the firm has had to engage an attorney to attempt to get paid on several ODOT projects where the prime got paid and failed to pay the subcontractors. She reported getting paid as a subcontractor with ODOT is difficult because of ODOT's failure to make sure that primes pay their subcontractors. Interviewee #35 said that the firm has submitted prompt payment claims to ODOT and has spoken to everyone at the ODOT DBE office. She stated that the firm fears retaliation and possible retribution which could hinder the firm's ability to continue to get contracts with ODOT if the firm is in open litigation against ODOT. She stated that the federal dollars used on projects require that DBE subcontractors be paid within a specific number of days. She stated that the Federal Highway Administration requires that a DBE office be able to enforce the prompt payment specifications but ODOT has not done anything to enforce the prompt payment specifications. She stated that relative to other public sector work, it is harder to receive payment on ODOT work because they will not enforce their own regulations.

Interviewee #36, a Caucasian female senior engineer of an engineering firm, stated that getting paid on ODOT's work is very subjective to the particular ODOT project manager assigned to the project. She stated that the project managers dictate the payment process and are all very different. She stated, "Some [project managers] are very, very difficult to pay things and others are very cut and dry."

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated "We did mega work at ODOT for years. One of the main reasons that I drifted away from ODOT work is that you have to fight to get your money; you have to write letters to Washington [and] get people to come down here from Washington. The only way we were able to do anything was through a representative with the ODOT Office of Civil Rights ... One of the last big state jobs we were on, the resident engineer fought us. If the representative from the ODOT Office of Civil Rights had not been right there on the job ... we would not have gotten paid." Interviewee #43 said that the firm's difficulties with receiving payments is based on prejudice and discrimination.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that of the bank's clients who have done work with ODOT, one of their "major complaints" is that they are not paid

on time according to their agreement. He said that one of the bank's customers had an issue getting paid by a separate prime, but that was resolved. He added that ODOT's payment is generally slower than other entities like municipalities.

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that her clients' experience getting paid on ODOT projects was "not favorable," noting that ODOT pays promptly, but the contractors do not then promptly pay her clients. She said that relative to other public sector work, it is harder to get paid on ODOT work because there are so many layers. She reiterated that her clients are third-tier subcontractors, and ODOT often does not even know about them because the subcontractors do not indicate that they have further subcontracted the work.

Recommendations.

Some interviewees recommended that ODOT improve its payment process. [Interviewees #: 5, 19, 32, 36, 43]. Interviewee #5, the Caucasian male co-owner of a geotechnical engineering firm, recommended that ODOT pay quicker.

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned bridge design engineering firm, said he had no suggestions for improving the administration of ODOT contracts or payment methods other than to "possibly streamline the queue, and shorten up the train."

Interviewee #32, an employee of a Caucasian male-owned construction firm, recommended that ODOT have stricter pay guidelines for paying subcontractors that take into account when the general contractor gets paid. She stated that the only guideline that exists is that subcontractors are to be paid within 30 days of the prime receiving payment, and the prime is usually paid within 10 days.

Interviewee #36, a Caucasian female senior engineer of an engineering firm, recommended that ODOT "stick with your contracts and try to actually pay people based on your contracts and not just what your PMs (Project Managers) think is what they are going to approve for that week."

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that ODOT needs to be forced to oversee the contracts to ensure that the subcontractor get paid within 10 days after the prime contractor is paid.

Some interviewees recommended that ODOT implement certain staffing changes.

[Interviewees #: 3, 10, 35, 44, TA #3]. Interviewee #3, the Caucasian male president of a civil engineering firm, recommended that ODOT have "more [staff] and consistent staff." He said that ODOT has a lot of staff turnover because their staff is overworked and they have too much to do. He commented that they are very hard-working.

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, recommended that ODOT move in a more timely manner because it is difficult to figure out staffing. He added, "I don't know how they're handling what they've got right now.... with the stimulus package that went through and the money they had to spend last year, some of the [resident engineers] have to be overloaded. I don't know what needs to be changed there."

Interviewee #35, the African American accountant of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated that to improve ODOT's administration of contracts and payment processes, ODOT should make several staffing changes.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that they would recommend that ODOT employ staff who are fair to people regardless of race.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, recommended that ODOT make sure that the ODOT staff who are reviewing contracts and invoices are qualified.

Some interviewees recommended that ODOT improve its notification of work opportunities, bidding process, and administration of contracts. [Interviewees #: 3, 6, 16, 20, 21, 23, 33, 35, 40, TA #3, TA #6, TA #7, TA #9, TA #10]. Interviewee #3, the Caucasian male president of a civil engineering firm, recommended that ODOT increase its communications with firms and said that if there is going to be a delay between submission of a response to the RFP and short-listing, please notify the responding firms of that delay.

Interviewee #6, the African American owner of a DBE-certified trucking company, recommended that ODOT make project information more readily available to subcontractors that may be interested in working on a project, and not only make that information available to primes.

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, recommended that ODOT improve its contract administration by changing its "mindset about compensation for engineering services."

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, made several suggestions for improving the notification and bid processes. He said that the agency should not have a CPA review the company's financials when it submits a bond. He described this as being duplicative. He said that ODOT struggles to obtain enough bids for projects relative to other public sector work, and he attributes this to a process that is designed to further a "Good Old Boy Network."

Interviewee #21, the Caucasian male general manager of a Caucasian male-owned bridge construction firm, recommended that ODOT inform bidders of revisions before expiration of the bid or give extra time to revise bids. He also recommended publishing the minutes of pre-bid conferences because the conversations at these conferences are not always clear.

Interviewee #23, the African American male owner of a DBE/SDBE/MBE-certified security, construction, and food service firm, recommended that primes should not start any work for ODOT until "subs are signed up and in place and goals are met."

Interviewee #33, the Caucasian male president of an engineering firm, recommended that the email notices go to all companies on file.

Interviewee #35, the African American accountant of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated that ODOT needs to upgrade their technology

and at least start using CDs because ODOT still sends floppy diskettes and the firm is required to submit information and bids on floppy diskettes.

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that an orientation to ODOT is needed for any new contractors because it is frustrating having to change submittals several times. She stated that ODOT relies on the resident engineers to communicate with the contractors and the resident engineers assume that every contractor is familiar with and knows how to work on ODOT projects. Interviewee #39 stated that an orientation for new contractors that provides information on how the submittal process and the payment process works would be helpful. She stated, "We particularly struggled with the submittals because we were unsure when to send them, who to send them to, and how many copies were needed. There was no direction."

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that using lump sum pricing would improve ODOT's notification or bid process.

Interviewee #47, the Caucasian female president of a WBE-certified trucking company, stated that she would recommend that ODOT send out monthly notices about upcoming bids and work opportunities.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, said, "We'd love to see [ODOT] do online plans," to provide an electronic version of the plans so that people do not have to drive and pick up the paper version. He said that ODOT is working on this right now.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, recommended that "once the agreement is written ... especially if it's the first time for a company, [ODOT should] make certain that the small business owner understands" what is required. He said that ODOT also needs a better system to resolve disputes when they arise and that a third party should be available, who is not associated with ODOT, to help resolve these disputes.

Interviewee TA #6, the president of a minority business development agency, suggested distributing the information necessary to understand the bidding process, and he indicated that he believes that his clients would be receptive. He further commented, "I believe it's an educational process. If we get a notification from ODOT, we will blast it out to our clients."

Interviewee TA #7, the director of an organization that provides assistance to small businesses, recommended that ODOT make their website more user-friendly and better abel to filter information so that users can access information that relates only to them, rather than sifting through large amounts of information that is not relevant. She also recommended extending the time for submitting bids because the amount of time for research, investigation, and estimating is sometimes too short.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that a recommendation for improving ODOT's administration of contracts is for ODOT to follow up and offer assistance to DBE firms to ensure that the DBE firms are bidding and receiving contracts. He stated that he would suggest that ODOT have events and

encourage the primes to come meet the DBEs on weekends or evenings to increase the opportunities for DBEs to connect with the primes. He stated, "This will allow ODOT to make information available about the projected needs and contracting potential throughout the State as well."

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that for ODOT to improve its notification or bid process there should more of a training or a liaison process between the prime contractor and subcontractors so that subcontractors become more aware of how the prime contractors are utilizing subcontractors and receive information regarding bid opportunities available from prime contractors.

Some interviewees recommended that ODOT make work more accessible to small businesses and DBEs. [Interviewees #: 7, 9, 25, 43]. Interviewee #7, the Native American owner of a federally-certified aerospace firm, recommended that ODOT get involved with the American Indian Chamber of Commerce and other groups that would allow the agency to access more segments of the population. He added that the agency should offer workshops to these organizations too.

Interviewee #9, the African American owner of a non-certified trucking company, recommended that ODOT spread out the work more.

Interviewee #25, the Hispanic male owner of a DBE-certified construction firm, recommended that ODOT improve the size of DBE goals on their contracts to be more in line with what you find in other states. He further stated that the "highest goal I have seen in Oklahoma is 7 percent, but I have seen double that other places."

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that the best way to assure that minority companies get work is to bring back the percentages for minorities instead of just saying DBE, and specify the types of minority instead of saying DBE in general. Interviewee #43 stated that ODOT should have a percentage for each minority group and women-owned businesses should be separated out from the minority-owned businesses.

Other interviewees had no recommendations for ODOT because they thought that ODOT was doing well already. [Interviewees #: 13, 18, 19, 32, 34]. Interviewee #1, the Caucasian male chief financial officer of a Caucasian male-owned heavy highway and bridge construction firm, said that he did not have any recommendations for ODOT and that he believes ODOT is doing a pretty good job.

Interviewee #18, the Caucasian male treasurer of a Caucasian male-owned heavy paving and grading construction firm, did not have any suggestions for improving ODOT's notification or bidding process. He said that occasionally ODOT publishes projects and then cancels them, but noted that this is because the agency is "subservient to its funding." He also had no recommendations for improving ODOT's contract administration or payment methods.

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned bridge design engineering firm, said that he did not have any recommendations for ODOT and that he believes ODOT is doing a pretty good job.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm, stated that he was pleased with ODOT's administration of contracts and payment methods and did not have any recommendations.

V. Marketplace Conditions.

Some interviewees indicated that marketplace conditions track the economy. [Interviewees #: 5, 13, 15, 17, 18, 19, 20, 21, 28, 29, 32, 33, 34, 38, 40, 41, 42, 46, 47, TA #2, TA #3, TA #4, TA #5, TA #7, TA #9, TA #10]. Interviewee #5, the Caucasian male co-owner of a geotechnical engineering firm, said that the current marketplace conditions are "slow" due to the slow economy.

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, said that marketplace conditions in the area for his industry are "like the rest of the country ... with the economy being down, I think the opportunities for engineering, especially in the private sector, are down a little bit.... I imagine that ODOT isn't putting out as many RFPs for engineering services.... You can see, definitely, a dropoff in the amount of available work in my industry, but probably not as bad as some other areas."

Interviewee #15, the Caucasian male co-owner and manager of an engineering firm, reported that the current marketplace conditions in the local area for firms of his size are very bad. He stated, "A lot of [firms] are going under." He said that he does believe that this is a function of the economy. He added, "The belts are getting real tight" for even the more-established firms that are not going under.

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that the local marketplace and the transportation industry in general is "very competitive," and "there is not enough work to go around for the number of contractors." He said that the marketplace conditions cycle from year to year: "one year it may be very good and the next year it may be extremely competitive."

Interviewee #18, the Caucasian male treasurer of a Caucasian male-owned heavy paving and grading construction firm, said that the marketplace for his company has been affected because of the economic downturn in Oklahoma.

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned bridge design engineering firm, said that there is still private work available, but that there has been a reduction in the amount of available work. Interviewee #19 stated that the reduction in the amount of private sector work is similar to the reduction in the amount of public work.

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, said that the downturn affecting the rest of the country has been more severe in Oklahoma because it lags behind the rest of the country, so while other parts of the country are experiencing a recovery, Oklahoma is getting worse.

Interviewee #21, the Caucasian male general manager of a Caucasian male-owned bridge construction firm, described the market conditions as "terrible" and "the worst I have ever seen." He noted that the conditions are bad in both the private and public sectors.

Interviewee #28, the Native American female president of a trucking and excavating firm, reported that the current marketplace is depressed in both the public and private sectors. She stated that there are a lot of projects out there but it is hard to get the contracts because now the larger companies are going after the smaller contracts and can outbid the smaller companies.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, reported the current marketplace in both the public and private sectors is suffering and slow.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that opportunities in the current marketplace are getting scarce. She stated that several companies opened to take advantage of the stimulus money from Washington, but those companies are now folding. She stated that things are more competitive, and the engineers' estimates are going down.

Interviewee #33, the Caucasian male president of an engineering firm, stated that the marketplace conditions are good but have experienced a general slowdown because of the economy. He stated that jobs are slower to bid, and budgets are tighter. Interviewee #33 stated that the marketplace conditions in the private and public sector have experienced the same general slowdown.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm, stated that the current marketplace conditions in this area are very poor. He stated that private sector work is completely dead. He stated, "Public sector work is there but you're fighting for everything you can get now."

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that the overall marketplace has slowed down considerably. Interviewee #40 stated there are opportunities available with ODOT, but you have to maintain relationships with ODOT personnel by contacting them and visit with them regularly.

Interviewee #41, the Hispanic male owner of a DBE-certified trucking firm, stated that there are fewer jobs in the marketplace, and there are more firms competing for the jobs. He said that other trucking firms in the market should maintain their prices so that everyone can remain competitive and make a profit. He commented that the project that he is currently working on is priced so low that he will not make any money, but he needed to work on the contract to survive.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that in the current marketplace there are many more bidders on every kind of project available than there once were, and there are fewer and fewer work opportunities.

Interviewee TA #2, the executive director of a Hispanic trade association, said that he thinks that "there's still a lot of work," but the State is starting to feel the crunch.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, reported that the area is in a downturn that is affecting small businesses. He noted that small businesses are "going to be the first ones that'll feel the impact." He said that he thinks that this is the same across the private and public sectors. He added that things have really slowed down in recent years.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, stated "In this area, there is not a lot of work, and what work is done is done in a section of northeast Oklahoma City.... There is some frustration among some of our members about accessing that work, but the kind of work they're doing down there is so big ... capacity is another issue...." He said that he had thought that the stimulus package might help the marketplace, but he has not seen that yet. He stated that the available projects are so large that the minority companies could not be competitive, because they did not have the capacity to meet the timelines required to immediately participate in the stimulus projects.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, reported the current marketplace as strained as Oklahoma historically lags behind the nation's economy in response to recessionary dips as well as recovery.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that the current marketplace conditions in general have slowed down. He stated that due to the federal government stimulus program, m ODOT received additional funding for projects. He stated that he has not heard of any DBE firms receiving additional contracting opportunities as a result of the stimulus money at ODOT. He said that state revenues are down and all State agencies have received major reductions in funds and major funding cuts.

Some interviewees reported that they have performed relatively well in the down market. [Interviewees #: 4, 6, 35, 37, 48, TA #1, TA #2, TA #8]. Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that he is currently only working with ODOT on its sidewalk projects and as a subcontractor to other companies who need DBEs. He stated that opportunities for work are there for new businesses, but it is a difficult process; he stated that the opportunities are about the same across the public and private sectors.

Interviewee #6, the African American owner of a DBE-certified trucking company, reported that the marketplace conditions are fine for his type of work, and this does not differ between the public and private sectors. He noted that the marketplace has changed recently due to the economy, but "for the most part ... the construction industry is still pretty strong even in the time of financial [crisis]" that the country is facing.

Interviewee #35, the Native American female president of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated that the stimulus money has helped and the firm has not experienced much of a slowdown in projects.

Interviewee #37, the African American male owner of a DBE-certified engineering firm, stated that the current marketplace conditions are pretty bad but his firm has been fortunate in that he had secured several projects and has not had to cut back.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that business is booming. He stated that the last five months of hard winter weather slowed down all construction activity. He stated, "Right now we have more than we can say grace over."

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, said that the local marketplace conditions "are above fair because of the State's commitment to funding roads and bridges."

Interviewee TA #2, the executive director of a Hispanic trade association, said he thinks that "right now and in the next several years, there should be ... a lot of work available, especially through ODOT," because the State is relocating a highway, "[and] that's a major project."

Interviewee TA #8, a program coordinator and a special program consultant for a minority trucking cooperative, stated that the current marketplace conditions are pretty good for firms in the construction industry. They stated that there are still a lot of high-dollar, high-profile projects that are being constructed. Interviewee TA #8 stated that they are aware that ODOT has received hundreds of thousands of dollars in federal stimulus money.

Some interviewees reported that the Oklahoma market has withstood the economic downturn to some extent. [Interviewees #: 8, 14, 24, 36, 43]. Interviewee #8, the African American president and owner of a civil and structural engineering firm, reported that "Oklahoma withstood the recession pretty well. It's not like it was, but it's not as bad as it could be."

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, reported that economic conditions in the area are very good when you compare them to other areas. He said that he believes that this is true because the State is oil-and gas-dependant, which has strengthened the economy when other sectors have encountered a major downturn. He mentioned that changes in the oil and gas markets have made the State less dependant on oil and gas and have made things better for Oklahoma.

Interviewee #24, the Caucasian male owner of a utilities construction firm, stated that he has not noticed significant changes in the marketplace even with the down economy.

Interviewee #36, a Caucasian female senior engineer of an engineering firm, stated that there does not seem to be a huge change in the marketplace conditions in her industry because most of the professionals she talks with continue to be busy both in the public sector and the private sector. She reported she has not noticed any significant changes in the local marketplace conditions.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that things have gotten more competitive in Oklahoma because contractors from other states that are in worse economic conditions than Oklahoma are competing for the work in Oklahoma.

Some interviewees reported that particular aspects of the marketplace have affected their business. [Interviewees #: 7, 9, 18, 31, TA #1]. Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that the workforce is a critical issue because the workforce is aging. He said that he does not know how to solve that without the State's involvement. He said that some industries are hiring from other industries and this is costly. He also noted that the marketplace "is limited by scope and size." He said, "There hasn't been enough effort between the states to coordinate and identify certifiable small businesses in multiple industries that could work with large companies. That would be real helpful."

Interviewee #9, the African American owner of a non-certified trucking company, reported that the current environment "is not favorable to smaller trucking companies like myself because the bigger trucking companies [are] getting all the work.... They get the contract, and they put all their buddies on the job.... That's what needs to change." He added, "ODOT is giving the same people

the work, and the same people that they [are giving] the work to [are] giving the same people the [subcontracts]."

Interviewee #18, the Caucasian male treasurer of a Caucasian male-owned heavy paving and grading construction firm, said that the marketplace for his company has been affected because the state budget is going to be short.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated that the current marketplace is volatile because some pricing is directly related to the oil prices. She added that the firm's business has not slowed down overall. She reported that she was aware of changes in marketplace conditions, including the weather affecting projects, businesses going green, and the change in mix design.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, said that "the federal funding delay has caused concern and slow-down of the federal level [of projects]."

Some interviewees reported that the marketplace conditions in the public sector are better than in the private sector. [Interviewees #: 1, 3, 5, 12, 15, 16, 18, 23, 24, 25, 27, 39, 43, 45, TA #5, TA #6, TA #7]. Interviewee #1, the Caucasian male chief financial officer of a Caucasian male-owned heavy highway and bridge construction firm, described the current marketplace conditions as "very good," but noted that the private sector is not very strong. He said that ODOT has done a very good job of utilizing the federal stimulus package which has helped contractors in Oklahoma.

Interviewee #3, the Caucasian male president of a civil engineering firm, stated that there "are a lot of firms and a lot of competition," but the problem is that private sector work is not available due to the economy. He said that ODOT has work, but has to "distribute it to everybody."

Interviewee #5, the Caucasian male co-owner of a geotechnical engineering firm, said "One of the things that I've learned over the years when we've had these downturns in the economy, you have to go where the money is, and the only place [that] has money is governmental work." He said that he is working in the private sector by choice, but everyone in that sector is hurting.

Interviewee #12, the owner of a female-owned non-certified civil engineering and land surveying firm, said that private development is currently slow, but the public sector has received stimulus funds, so that work is "steady, if not on the upturn."

Interviewee #15, the Caucasian male co-owner and manager of an engineering firm, said that firms working in the public sector have more work now "since the stimulus package came out." He said that he has not yet seen a lot of its impact, but he is concerned about the State's accountability procedures concerning the use of this funding.

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, reported that "private work ... has dried out." He said that "municipal work" is using engineering firms. He added, "We get our fair share.... I applied for it, but I haven't received any work" with ODOT.

Interviewee #18, the Caucasian male treasurer of a Caucasian male-owned heavy paving and grading construction firm, said that the marketplace is considerably worse in the private sector due to a lack of credit.

Interviewee #23, the African American male owner of a DBE/SDBE/MBE-certified security, construction, and food service firm, reported there are and have always been more opportunities for his firm in the public sector.

Interviewee #24, the Caucasian male owner of a utilities construction firm, reports that jobs in the public sector, which includes cities and rural water districts, are usually more readily available than private sector jobs.

Interviewee #25, the Hispanic male owner of a DBE-certified construction firm, reported there are currently "more jobs available in the public sector, which is the reverse from a couple of years ago."

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that that the current marketplace conditions in the public sector are good because of the stimulus money. She stated that there are fewer opportunities in the private sectors and in the public sector bid openings, and there are quite a few unfamiliar companies entering the industry and bidding on projects that did not exist before.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that in the current marketplace, the public sector has a lot of work opportunities spurred by the stimulus package.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that the current market conditions are slow in the private sector because of the economy. He stated that the public sector continues to be productive because of the government funding. He stated that the increasing price of oil directly affects the work available in the private sector.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, reported seeing a dramatic decrease in private sector projects, which is the biggest downside for small business. He stated that businesses were doing fine in the private sector and now are shifting to compete for public sector work, which requires entirely different preparation. Interviewee TA #5 stated, "Previously we've seen five to seven people bidding on projects, and, now, there are 15–20 firms bidding. Increased competition is driving profit margins down to near nothing."

Interviewee TA #6, the president of a minority business development agency, reported that the current marketplace conditions are average in the local area. He stated that the best opportunities today are in the public sector, but more opportunities for his clients to actually perform work exist in the private sector. Interviewee TA #6 reported that in the private sector, development and work have slowed because of the economy.

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that although the economy is bad overall, there is still money available to ODOT. She noted that her clients see the money going to ODOT, but it never gets to them. She added, "More

opportunity is thought to exist in the public sector, but nobody is getting it, and so it seems like it is getting worse." She said that the private sector is bad as well.

One interviewee reported that the marketplace conditions are better in the private sector than in the public sector. [Interviewee #: 30]. Interviewee #30, the Caucasian male co-owner of a transportation firm, stated that the current marketplace provided far more opportunities in the private sector than in the public sector because the economy was down. He stated that the in the current marketplace the public sector requires bargain pricing for services. Interviewee #30 reported that in the private sector the prices have remained the same, and the major prime contractors that he works for have not pressured him to lower his prices.

Many interviewees shared their thoughts regarding what it takes to succeed in today's marketplace. [Interviewees #: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 42, 43, 45, 46, 47, TA #1, TA #2, TA #3, TA #4, TA #5, TA #6, TA #7, TA #9, TA #10]. Interviewee #1, the Caucasian male chief financial officer of a Caucasian male-owned heavy highway and bridge construction firm, stated that for a firm to be successful in the local marketplace, one needs to be good at what they do and know what they are good at.

Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, stated that in order to be successful, a firm must be competent and know what they are doing.

Interviewee #3, the Caucasian male president of a civil engineering firm, said that in order to be competitive, "you have to be very consistent and high quality, and you have to be reasonably priced."

Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that a firm needs money to be competitive in this type of business.

Interviewee #5, the Caucasian male co-owner of a geotechnical engineering firm, reported that to be competitive in his line of business, one must "be proficient ... in your trade." He added that "almost every project anybody does has a deadline. You need to meet that deadline."

Interviewee #6, the African American owner of a DBE-certified trucking company, stated that to be competitive in his line of work, a firm must focus on the bidding process and the quality of work the firm provides.

Interviewee #7, the Native American owner of a federally-certified aerospace firm, commented that in order for a firm to be competitive, it must "develop a good marketing program that has to be based on core competencies." He added that "you need to find strong teaming relationships, joint venture relationships, partnering relationships where you can work together with other companies that may have experience you don't. You have to aggressively market to the larger companies to establish relationship opportunities and understand that that process may take quite a while." He also stated that companies should work early to establish financial relationships, and companies should have their line of credit before looking into contracts.

Interviewee #8, the African American president and owner of a civil and structural engineering firm, said "If you're going to develop in the private world, you're certainly going to have to be

patient. In the public world, you certainly need to make sure that ... [you] have the ability to do whatever" a client wants to do. He added that in order to be competitive, "you need to really have something unique to offer."

Interviewee #9, the African American owner of a non-certified trucking company, noted that in order to be competitive, you have to know the right people and get your name out there. He added that longevity of the business gives an advantage.

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, said that in order to be successful, a company must provide reliable quality control, be honest, and provide a consistent work product.

Interviewee #12, the owner of a female-owned non-certified civil engineering and land surveying firm, reported that in order to be competitive in his line of business, "quality of work and ability to get projects approved through the local government review agencies" is key.

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, said that in order for a firm to be competitive in his line of business, "You have to deliver a good product and do it in a timely manner. I think if you have that reputation, then you can be competitive.... Our industry is just about relationships more than anything."

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, commented that "experience, management, knowledge and skills, and the ability to manage limited resources and juggle the unpredictable roller coaster that construction is" are required to be competitive in this business. He stated that access to credit is always a factor, but it is less of a problem if you are not so capital-dependent.

Interviewee #15, the Caucasian male co-owner and manager of an engineering firm, commented that "quality and compassion" are important to succeeding in this line of business.

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, commented that in order to be competitive in this line of business, a firm must "have knowledgeable staff, modern equipment, and you need to know people."

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that in his view, in order to be competitive, "you have to keep your costs low and get your work done."

Interviewee #18, the Caucasian male treasurer of a Caucasian male-owned heavy paving and grading construction firm, said that in order to be competitive, a company must understand costs and adjust pricing.

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned bridge design engineering firm, said that in order to be competitive, a firm just needs to be able to do things "quicker and cheaper," but at the same time providing the same level of quality. He commented that taking advantage of new technology can help with this.

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, said that it takes "field supervision, staff and knowledge" to be competitive in his line of work.

Interviewee #21, the Caucasian male general manager of a Caucasian male-owned bridge construction firm, said that in order for a firm to be successful in his line of work, you need good people with longevity and good equipment.

Interviewee #22, the Caucasian male owner of a non-certified aerial mapping firm, stated that in his line of work "it is the quality of your work that matters. It is a small community of land surveyors." He reported that gaining experience and networking have been keys to his success.

Interviewee #24, the Caucasian male owner of a utilities construction firm, shared that to be competitive you have to work smarter and more efficiently than your competitors to control costs and deliver projects on time and budget.

Interviewee #25, the Hispanic male owner of a DBE-certified construction firm, stated that to remain competitive your firm has to be "committed to quality work and developing good relationships that will eventually lead to more work."

Interviewee #26, a supervising manager of a Caucasian-owned construction firm, reported that the "key to competing is doing safe and quality work the first time with no redos through effective project management." He stated that "getting it right the first time puts you out ahead of most of the competition."

Interviewee #27, the Caucasian female owner of a DBE-certified erosion control firm, stated that to be competitive "you have to know what your costs are and you have to manage your work. You have to be hands-on with your ownership. Knowing your costs and controlling your costs, that's the key."

Interviewee #28, the Native American female president of a trucking and excavating firm, stated that maintaining a set completion time and personal honesty helps the firm stay competitive.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, said that he believes that a firm needs to have reliable equipment and provide professional service in order to be competitive in this line of business.

Interviewee #30, the Caucasian male co-owner of a transportation firm, stated that for a firm to be competitive in this line of business, it needs to provide good service at a good price.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated that in order for a firm to be competitive in this line of business, she recommended going green and utilizing recycled products.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that for a firm to be competitive in the current market, a firm needs to know what it takes to get the job done, know the best suppliers, and have a good reputation for getting the job done.

Interviewee #33, the Caucasian male president of an engineering firm, stated that for firms to be competitive in this line of business, "you need to know your skills, be on time, and have reasonable prices."

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm, stated that the firm will need to lower its profit margin to be competitive.

Interviewee #35, the Caucasian female vice president of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated that for a firm to be competitive, it must have a good reputation, have dependable equipment, and maintain a well-trained workforce.

Interviewee #36, a Caucasian female senior engineer of an engineering firm stated that for a firm to be competitive in this line of business, it needs to "know what you're doing, have good people and good execution."

Interviewee #37, the African American male owner of a DBE-certified engineering firm, stated that to be competitive in the local marketplace you have to be an expert in your field or be prepared to hire someone who is. He stated you cannot afford to make any mistakes; you have to meet deadlines, have the equipment, software and people to be able to deliver what you were contracted to deliver.

Interviewee #38, the Native American female president of an engineering firm, stated that a firm needs to provide good services at competitive prices in order to be competitive in the local marketplace.

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that for a firm to be competitive in this line of work the firm must manage its labor and costs.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that in order for a firm to be competitive in this line of work, it is important to maintain relationships with the right people. He stated that a firm also has to be willing to deliver a higher quality of work than their competitor in order to be competitive.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that for a firm to be competitive in this line of work, the firm has to diligently stay on top of the job costs.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that to be competitive in this line of work, a firm needs the right equipment, capability, and production.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that to be competitive in this line of work, a firm needs to have its own equipment because you cannot compete with a guy who owns his equipment if you have to rent equipment. He stated, "The more of your job you can do yourself without having to go outside of the company, the better off you are."

Interviewee #46, the African American male owner of a DBE-certified safety and environmental consulting firm, stated that for a firm to be competitive they have to market heavily, they need to have the experience and know-how, and they have to know somebody.

Interviewee #47, the Caucasian female president of a WBE-certified trucking company, stated that for a firm to be competitive in her line of work they need to be "male." She stated that if a woman owns the business and has a man out front they get work, but a woman-run company has problems getting work.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, said that to be competitive in the industry a business needs to have "good business practices, good pricing, and the quality of your work has to be competitive."

Interviewee TA #2, the executive director of a Hispanic trade association, said that in order for a firm to be competitive, he thinks that "you have to have your ducks in line, you have to have the certifications, you have to have your insurance, all those things that [are required]" to do business.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, commented that in order to be competitive, a company needs "to have a lot of experience and no debt."

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, said it takes different things to be competitive on the prime level and on the subcontracting level. He said that on the prime level, "capacity" is required to be competitive.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that he believes having a good marketing plan and being ethical and capable are what is required for a firm to be competitive in the local marketplace.

Interviewee TA #6, the president of a minority business development agency, said that in order to be competitive in the local marketplace, a firm "has to be good at what you do, competitively bid on jobs, and show up to work."

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that in order for firms to be competitive in the local marketplace, they need to market and network. She added that firms also need cash flow, but that is hard to obtain with the limited financing available.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that to be competitive, firms have to continue to develop and strengthen their capability and capacity to do work. He stated that firms need to have resources readily available for things such as marketing and financing.

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that for firms in construction to be competitive in the local marketplace, a firm should obtain the various certifications and complete work on time, establish and maintain financial capabilities and increase the firm's bonding capacity.

VI. Potential Barriers and/or Discrimination Based on Race, Ethnicity, or Gender.

The interviewees were asked whether they were aware of or had experienced any barriers to pursuing work in the local marketplace, and, if so, whether they believed that discrimination based on race, ethnicity, or gender had contributed to such a barrier. The interviewees were then asked whether they were aware of or had experienced certain specific barriers identified below.

A. Financing.

Some interviewees identified obtaining financing as a barrier to pursuing business opportunities. [Interviewees #: 1, 2, 4, 5, 6, 7, 8, 9, 11, 13, 15, 18, 19, 20, 23, 29, 30, 31, 32, 34, 37, 38, 40, 42, 43, 44, 45, 46, 47, 48, TA #3, TA #4, TA #5, TA #6, TA #7, TA #9, TA #10]. Interviewee #1, the Caucasian male chief financial officer of a Caucasian male-owned heavy highway and bridge construction firm, stated that everybody is having issues related to financing.

Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, stated that in general, obtaining financing has been a barrier for his business. He stated that he does believe that discrimination is involved. He said, "If we go apply for a bank loan and try to borrow \$50,000–100,000 dollars, there is just disapproval after disapproval."

Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that obtaining financing can be a barrier to new businesses entering the marketplace. He reported that when he started his business, he was unable to obtain financing from the bank. He stated that he was able to borrow money from a friend, and the company where he used to work helped to finance a project and, in turn, shared in the profits. He reported that he used his own profits from this first job, along with the loan, to start his own business. Interviewee #4 stated that the bank did not engage in discrimination in denying him financing; rather, he reported that he was unable to obtain financing because he did not have collateral.

Interviewee #5, the Caucasian male co-owner of a geotechnical engineering firm, reported that he has not borrowed money in a long time, and he did not borrow money to start his business this time. However, he said that it "could be" a barrier based on discrimination because of "the way people are."

Interviewee #6, the African American owner of a DBE-certified trucking company, stated that, although he has not experienced this barrier, he said that he has heard "about it all the time ..., and it's more geared toward minorities."

Interviewee #7, the Native American owner of a federally-certified aerospace firm, commented that obtaining financing is a barrier, but he does not "think it's a discriminatory issue." He commented that "many times small businesses are not prepared for the type of financing they're going to need." He added that in his opinion ODOT and other agencies could help by giving "them access to more resources where they could be coached ... on what the financial requirements are going to be to perform certain contracts. I don't think it's really the government's ... responsibility to help them understand that completely, but ... many times small businesses start out ... and their first ... focus is getting the contract relationship.... When they do that, sometimes they neglect to take care of ... the infrastructure issues" that determine how they will perform the contract if they win it.

Interviewee #8, the African American president and owner of a civil and structural engineering firm, said that he does think financing can be a barrier because "we all need financing ... starting out or sometimes when we're older firms." He said that denial of financing can be based on many things, including race. He said that even though he was allowed to borrow \$200,000 at one time in the early 1980s, he had to put up substantial collateral for a \$25,000 loan in 1985.

Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, reported that obtaining financing has been problematic. He said that he went to the bank to borrow some money, but the bank said that he had to put up the house just to get \$10,000. He said that the company started to look into federal loan funding, and there is so much red tape that the "little guys" like him cannot deal with it because they have to be able to go day-by-day just to find out which door to open to get a grant.

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, reported that this is not a barrier for him, but he has heard of this being a problem for people on the construction end of his industry.

Interviewee #15, the Caucasian male co-owner and manager of an engineering firm, said, "Financing is tight for everybody right now."

Interviewee #18, the Caucasian male treasurer of a Caucasian male-owned heavy paving and grading construction firm, commented that for a DBE, the financial barrier is probably the single largest barrier because his line of work is "capital-intensive." He stated that a company needs to be able to hire people, buy machinery, and buy materials before ever getting to the site, and there is a lack of available financing.

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned bridge design engineering firm, said that he was unfamiliar with financing as a barrier, but noted that the economy generally made this a potential barrier. He said that it would appear to apply to everyone across the board.

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, said that financing is "absolutely" a barrier that his company has experienced, but that it is not discriminatory.

Interviewee #23, the African American male owner of a DBE/SDBE/MBE-certified security, construction, and food service firm, reported that obtaining financing is difficult even when using special financing programs that ODOT offers. He stated, "[It is not productive], you aren't going to get the financing. There is nothing unique about this financing."

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that obtaining financing is a barrier faced by firms in the local marketplace. He stated he recently experienced this barrier while seeking financing with his local bank, and he believes discrimination slows the process and plays a role in obtaining financing.

Interviewee #30, the Caucasian male co-owner of a transportation firm, stated that he is aware that obtaining financing is a barrier faced by firms. Interviewee #30 stated that he has personal experience with obtaining financing and said that in the past he was required to provide titles to

equipment for collateral. Interviewee #30 stated that he does not believe discrimination contributes to the barrier of obtaining financing.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated that she is aware that financing is a potential barrier for firms, but she said that she does not believe it to be based on discrimination but, rather, the ability of the firm to repay.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that she is aware that obtaining finance is a problem for firms, although she has not had personal experiences with this barrier. She said that she believes the problem could be based on discrimination.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm stated that he is aware that obtaining finance is a problem for firms. He stated that he has had personal experience with obtaining finance being a barrier for his firm but he does not believe the barrier to be based on discrimination.

Interviewee #37, the African American male owner of an engineering firm, stated that he is aware that obtaining finance is a potential barrier for firms and believes discrimination contributes to the barrier.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that he is aware that obtaining finance is a potential barrier for firms. Interviewee #40 stated that the firm has had personal experience with obtaining finance being a barrier because banks do not want to loan money, particularly on equipment that is quickly outdated and depreciates. He stated that he does believe that discrimination contributes to this being a barrier.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, reported that she is aware that obtaining financing is a potential barrier for firms. She said that the firm has had personal experience with this barrier, particularly when the firm first got started. She stated that the banks would not allow her to secure loans without her husband even though she was the majority owner, and now, banks are not financing as much as they have been in the past. She commented that she believes that gender discrimination contributes to obtaining financing being a barrier because men are basically in control of the banking institute.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that they are aware obtaining finance is a barrier for firms. Interviewee #43 stated that the firm has had personal experience with financing being a barrier and they believe that discrimination contributes to the barrier.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that they are aware that obtaining financing is a barrier for firms. Interviewee #44 stated that the firm has had personal experience with obtaining financing being a barrier and believes that discrimination contributes to the barrier. Interviewee #44 stated that while working on a project the payroll was approximately \$50,000 a week. He stated that the bank would not loan the firm any money, even with the firm providing proof of the contract and copies of the invoices as well as the prime contractor assuring the bank that they would send the money directly to the bank.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that he is aware that obtaining financing is potential barrier for firms. Interviewee #45 stated that the firm has had personal experience with obtaining finance being a barrier and believes discrimination contributes to the barrier. He reported that when he was working in volume and he would go to the bank to access a loan and oftentimes the first payment would become due before the first payment on the job was received. He said that other firms would have an escrow or a line of credit and access only as much as they needed and pay interest only on the portion used.

Interviewee #46, the African American male owner of a DBE-certified safety and environmental consulting firm, stated that he is aware that obtaining financing is a potential barrier for firms and believes discrimination contributes to the barrier. He noted that he did not obtain financing for his firm, but instead all the start-up for his company came from his retirement funds.

Interviewee #47, the Caucasian female president of a WBE-certified trucking company, stated that she is aware that obtaining financing is potential barrier for firms. Interviewee #47 stated she had personal experience with obtaining finance being a barrier and she believes discrimination contributes to the barrier.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that he is aware that obtaining financing is potential barrier for firms. He stated that as a minority, it is easier to obtain financing because there is more access to the funds. Interviewee #48 stated that his firm has had personal experience with obtaining financing being a barrier because of his past payment history, but does not believe discrimination contributes to the barrier.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that this is a barrier because "credit is pretty tight," and it is difficult if not impossible for a start-up business to get financing. He said that a business needs "working capital to do a job" in both the public and private sectors. He added that he did not think discrimination was involved.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, reported that his members have experienced barriers in obtaining financing. He said that the organization has found "that it's very tough for new African American businesses ... to get the amount of financing that they need. I'm not going to say that it's because of race.... A lot of it has to do with location and the type of work that they do, and they consider that as they make determinations on how financially stable they are or successful they will be," but this is difficult for someone who wants to work "in a minority area or [wants] to work with minority firms."

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that he felt that obtaining financing is a huge barrier faced by his clients. He reported that his clients are experiencing race and gender discrimination in obtaining financing, but he added that current difficulties are due to the fact that financial institutions have toughened their qualification standards, and any perceived discrimination that exists is more centered on the tough economic times.

Interviewee TA #6, the president of a minority business development agency, said that he is aware that obtaining financing is a barrier, that his clients have experienced personally and that it is based on discrimination.

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that she is aware of obtaining financing being a problem for her clients, that they have had personal experiences with this barrier, and that she believes gender, race, and ethnicity discrimination contributes to this barrier.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that he is aware obtaining financing is a barrier that his clients have experienced. He stated that he believes discrimination contributes to this barrier based on the racial divide.

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that she is aware obtaining financing is a barrier for firms. She stated that her clients have experienced problems with obtaining financing and she believes discrimination contributes to the barrier. She stated that the problem with discrimination based on race, ethnicity, or gender is that no one comes out and says, "I'm not going to give this to you because of your race." She stated that you can, however, recognize the disparity in the number of minority or small companies that are getting financing and bonding.

Other interviewees did not perceive obtaining financing as a barrier to pursuing or obtaining business opportunities. [Interviewees #: 3, 10, 12, 14, 16, 17, 21, 22, 25, 26, 27, 28, 33, 35, 36, 39, 41, TA #1, TA #2]. Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, said that obtaining financing is not a barrier to pursuing or obtaining business opportunities. He stated, "I guess the banks were more stingy ... but that's in general because of the economy, not because of just us."

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, reported that he was not aware of a barrier in obtaining financing based upon his race. He said that he is aware of other minority-owned firms that have experienced what they believe and report to be problems with getting credit based on race.

Interviewee #22, the Caucasian male owner of a non-certified aerial mapping firm, stated that he has had no problems obtaining financing. He also stated, "I went through the SBA, and they guided me through setting up the LLC and bank loan. The process took less than a month." He stated that the SBA was "extremely helpful."

Interviewee #25, the Hispanic male owner of a DBE-certified construction firm, stated that financing was not a barrier to his firm. He said that "we did our own financing, we never [borrowed] anything from the banks."

Interviewee #33, the Caucasian male president of an engineering firm, stated that he is not aware that obtaining financing is a barrier for firms because he does not believe companies should borrow money to operate. He stated this was not a barrier with which he has had personal experience, and he does not believe discrimination is a barrier to obtaining financing.

B. Bonding.

Some interviewees identified obtaining bonding as a potential barrier to pursuing business opportunities. [Interviewees #: 2, 4, 7, 11, 13, 20, 23, 26, 27, 29, 31, 34, 35, 37, 38, 39, 40, 42, 43, 44, 48, TA #1, TA #2, TA #3, TA #4, TA #5, TA #6, TA #7, TA #9, TA #10]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, stated that he has people who want to bond his business, but he does not like the way that they want to do it. He said that discussing bonding would put him in the role of the prime contractor; he also said that he believes that bonding may cause one to lose control over the business and allows other people to "pull the strings." Interviewee #2 said that bonding is a barrier, and he believes that discrimination is involved because most of the bonding is for the big general contractors. He also said that bonding has a lot of financial requirements that a lot of people do not meet; there "is a bureaucracy to keep subcontractors where they are."

Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that he waited two years until he felt he was at capacity before he approached the bonding company, which initially approved him for \$1 million; he is now bonded up to \$5 million. He stated that obtaining bonding could be a barrier for a company without capacity, but he reported that he did not believe this would involve discrimination.

Interviewee #7, the Native American owner of a federally-certified aerospace firm, reported that this is a barrier because "there's risk associated ... with performing these jobs," and competent small companies may not be able to meet the bonding requirements necessary to move up in jobs in terms of "size and scope." He said that he knows of some established companies "that are really limited in ... the types and size of jobs" they can take on because of these requirements. He said that he did not think that discrimination is involved. He said that there simply needs to be more education available concerning how to get the bonds you need.

Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, said that the company has had problems with bonding, and it has been particularly difficult. He stated that smaller contractors who have not yet had to get bonding may have a harder time getting on larger jobs than larger companies who have had to get bonded before.

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, said, "I've talked to a number of construction DBEs that really have problems getting bonding. I think the requirements of the bonding are sometimes so high that it's hard for any firm starting up to meet those capital requirements.... I've heard stories ... if you have a market with so many bonding companies, a lot of times they didn't want to deal with DBE firms ... or they had to go out of state to get their bonding, or things of that nature, and the gentlemen that I've talked to kind of always felt that it was because they were African American."

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, said that bonding requirements are a barrier that his company has had experience with, but that it is not discriminatory.

Interviewee #23, the African American male owner of a DBE/SDBE/MBE-certified security, construction, and food service firm, stated that his firm has been bonded for up to \$10 million in

the past but is currently only bonded for \$1 million. He said that his firm is in litigation right now with the DOD over payment owed his firm, which has impacted their bonding capacity. He stated that "bonding is always an issue." He said that he does not believe the barrier is related to discrimination

Interviewee #26, a supervising manager of a Caucasian-owned construction firm, stated there had been some issues with bonding because the firm wants to grow, "but we have been limited a bit by the size of our bonding."

Interviewee #27, the Caucasian female owner of a DBE-certified erosion control firm, stated that bonding is difficult, but it's always difficult in all industries for everyone.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that he is not sure, but believes that the ability to obtain bonding and the capacity to bond is a barrier for firms. He reported that he did not have personal experience trying to obtain bonding, but he thinks that the current economic times would play more of a factor than discrimination.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated that she is aware that the ability to obtain bonding is a potential barrier for firms. She stated that she has had personal experience with bonding as a barrier because in the past, the firm only had to provide financial statements, but since the finance industry has changed, the bonding companies now want reviewed financial statements and the process is much more expensive. She stated that she does not believe that the bonding barrier is based on discrimination but, rather, on the economy and the stability of the firm.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm, stated that he is aware that bonding is a barrier for firms. He stated that he has had personal experiences with bonding being a barrier for his firm but he does not believe the barrier to be based on discrimination.

Interviewee #35, the African American accountant of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated that she is aware that bonding requirements and obtaining bonds could be a barrier for firms, but she does not believe discrimination contributes to the barrier.

Interviewee #37, the African American male owner of an engineering firm, stated that he is aware that bonding could be a barrier for firms. He stated that he has heard of companies having problems getting bonds but also knows of firms that have secured bonds in the millions. He said that of those firms that he knows have had problems getting bonds, he believes discrimination contributed to the barrier.

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that she is aware that bonding requirements and obtaining bonds are potential barriers for firms. She stated that she has not had any personal experience with bonding requirements and does not believe discrimination contributes to the barrier.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that he is aware that bonding requirements and obtaining bonds are potential barriers

for firms. He stated that he has not had any personal experience with bonding requirements and obtaining bonds, but he believes discrimination contributes to this being a barrier for firms.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that she is aware that bonding requirements and obtaining bonds are potential barriers for firms. She stated that she has not had any personal experience with bonding requirements, but she believes that the barrier is caused mainly by lack of financing and is not necessarily the result of discrimination.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that they are aware bonding requirements and obtaining bonds are potential barriers for firms. Interview #43 stated that they do not believe that discrimination contributes to bonding requirements and obtaining bonds being potential barriers for firms.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that they are aware bonding requirements and obtaining bonds are potential barriers for firms. They stated that they have had personal experience with bonding requirements and obtaining bonds and they believe that discrimination contributes to bonding requirements being a barrier for firms.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that he is aware that bonding could be a barrier for firms. He stated that he believes that problems with access to bonding are based on discrimination targeted at small firms. Interviewee #48 stated that smaller firms get charged higher premium rates. Interviewee #48 stated that bonding companies will bond small companies for \$200,000–\$400,000 but charge the maximum rates. He stated that larger construction firms can bond a \$30 million project for the same price that a small firm can bond a \$2 million project.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, said "recently I became aware of a subcontractor having problems getting bonding. I pointed him to the Federal DBE Bonding Program that I learned about from the Department." He reported that he does not believe the problem related to bonding was based upon discrimination.

Interviewee TA #2, the executive director of a Hispanic trade association, said "In the Hispanic community, there are some barriers in the bonding requirements." He said that some business owners may have a "documentation problem [so] they're not able to bond." He added that he does not think that this is based on discrimination.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that bonding is a barrier because "companies who provide bonding are not regulated." He added that the companies who provide bonding have criteria that work "against new businesses, small businesses, minority-owned businesses." He stated that he does think that discrimination is involved due to the lack of regulation. He recommended that ODOT "provide bonding to people with experience or waive the bonding requirements up to a certain dollar amount."

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, reported, "Bonding requirements used to be an issue, but ... both the government sectors and even the primes have been very proactive in trying to figure out ways ... to meet the bonding requirements, so unless you [have] major problems, I ... think that there has been a lot of proactive programs put in place in order to help you meet bonding requirements." He stated that he does not think it is the issue that it used to be.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that the ability to obtain bonding and the capacity to bond is a huge barrier faced by his clients all the time. He stated that the discrimination that currently exists is more of a result of the tough economic times. He stated that his clients have reported experiencing race and gender discrimination because companies often price the bonds so high that it makes it prohibitive for DBE firms.

Interviewee TA #6, the president of a minority business development agency, reported that he is aware that bonding requirements and obtaining bonds are barriers that firms might face. He stated that his clients have experienced this barrier personally, but he cannot report that the barrier is solely based on discrimination. Rather, he indicated that it has a lot to do with capacity. He said, "Bonding principally is based on what you have done in the past and what is your track record for doing work along this scope. If they have not had experience to do this scope of work, then they are going to have a problem getting bonding."

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that she is aware of this being a problem for her clients, that they have had personal experiences with this barrier, and that she believes that gender, race, and ethnicity contribute to this barrier.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that he is aware bonding requirements and obtaining bonds is a barrier for firms. He stated that racial discrimination contributes to bonding requirements being a barrier for firms.

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that she is aware bonding requirements and obtaining bonds are barriers for firms. She stated that her clients have experienced problems with this barrier and she believes discrimination contributes to the barrier.

Other interviewees did not perceive barriers in connection with obtaining bonding. [Interviewees #: 1, 3, 6, 10, 14, 15, 16, 17, 18, 19, 21, 25, 28, 30, 32, 33, 36, 41, 45, 46, 47]. Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, reported that he was not aware of a barrier in obtaining bonding based upon his race. He stated that he has utilized joint venturing and mentoring to address the bond requirements and to build his own bond capacity.

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that he was not aware of any barriers to obtaining bonding. He said, "If you have money you can get bonding."

Interviewee #18, the Caucasian male treasurer of a Caucasian male-owned heavy paving and grading construction firm, said that he was not aware of this being a barrier, but he noted that it could be a problem because new contractors "do not have a track record" to help them obtain bonding.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that she is not aware that bonding is a problem for firms. She stated that the firm has not had any problems in this area and has not heard of other companies experiencing the problem.

C. Insurance.

Some interviewees identified insurance requirements as a barrier to pursuing business opportunities. [Interviewees #: 4, 7, 19, 20, 30, 31, 37, 38, 39, 42, 44, 45, 46, 48, TA #2, TA #9, TA #10]. Interviewee #7, the Native American owner of a federally-certified aerospace firm, reported that obtaining insurance was a barrier to his company in the beginning. He noted that part of the issue is associated with small companies not knowing where to go, especially in rural areas. He added that he did not think that the problem was based on discrimination.

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned bridge design engineering firm, said that the costs of insurance have increased and that the increase could pose a potential barrier.

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, said that insurance requirements are a barrier that his company has had experience with, and that the barrier is discriminatory.

Interviewee #30, the Caucasian male co-owner of a transportation firm, stated that he is aware that insurance requirements and obtaining insurance could be a potential barrier for a firm. Interviewee #30 stated that he has no personal experience with insurance as a barrier and that he does not believe discrimination contributes to the potential barrier of insurance.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated that she is aware that insurance is a barrier for firms. She stated that her firm has not had any personal experience with insurance as a barrier. Interviewee #31 stated that the economy is the reason for the existence of insurance as a barrier, and she does not believe discrimination contributes to this potential barrier.

Interviewee #37, the African American male owner of an engineering firm, stated that he is aware insurance requirements and obtaining insurance is a barrier for firms. He said that insurance requirements are a temporary barrier for his firm because if a particular project asks for more insurance than he possesses, he will pay the additional premium to get the required insurance. He said that he believes that discrimination contributes to insurance requirements and obtaining insurance being a barrier for firms because primes can cover subcontractors with their insurance or assume that there is not that much risk and not require the subcontractor to provide additional insurance. He reported that discrimination with insurance requirements has happened to him with two of the largest construction companies in Oklahoma. He reported that one company required a large amount of insurance to work on a particular project and required very exact wording on the policy which took several attempts and about 90 days to get the insurance in place, which delayed

payment. He said that sometimes because of the rigid requirements you may never get the insurance approved for a project and your insurance company may refuse to include the exact wording requested. He stated, "I think [large companies] set the processes up to make it difficult for those persons they don't want to work with. If they want you in, you don't have to do anything."

Interviewee #38, the Native American female president of an engineering firm, stated that she is aware that insurance requirements and obtaining insurance is a potential barrier for firms. She reported that her firm has not experienced this barrier, and added that it is hard to tell and you may never know if discrimination contributed to being turned down for insurance.

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that she is aware insurance requirements and obtaining insurance is a potential barrier for firms. Interviewee #39 stated that although she has not had any personal experience with this, she does not believe discrimination contributes to the barrier.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, said that she is aware of insurance requirements and obtaining insurance being a potential barrier for firms. She reported that she has not had any personal experience with this, but she believes that the barrier is based on finances more so than discrimination.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that they have had personal experience with insurance requirements and obtaining insurance being a barrier and believe that discrimination contributes to the barrier. Interviewee #44 stated that when it was time for the firm to renew its general liability policy, they went into an agency in El Reno and the company refused to even quote a policy.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that he is aware insurance requirements and obtaining insurance is a potential barrier for firms. He stated that he has not had any personal experience with insurance requirements and obtaining insurance being a barrier but that it is based on finances. He stated that large companies can self-insure their own companies and "small companies have to pay as you go." He stated that he does not believe discrimination contributes to this barrier because it is based on finances.

Interviewee #46, the African American male owner of a DBE-certified safety and environmental consulting firm, stated that he is aware that insurance requirements and obtaining insurance is a barrier for firms and that he does believe discrimination contributes to the barrier.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that he is aware insurance requirements and obtaining insurance is a barrier for firms. Interviewee #48 stated that he has had experience with insurance requirements being a barrier and paid higher rates for a long time. He stated that he does not believe discrimination contributes to the barrier.

Interviewee TA #2, the executive director of a Hispanic trade association, said that in the Hispanic community, there are some barriers in the insurance requirements. He said that some business owners may have a "documentation problem" that would limit their access to insurance. He added that he does not think that this is based on discrimination.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that he is aware that insurance requirements and obtaining insurance are barriers for firms. He stated that discrimination contributes to this being a barrier.

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that she is aware insurance requirements and obtaining insurance are barriers for firms. She stated that her clients have had personal experience with obtaining insurance being a barrier but she does not believe discrimination contributes to the barrier.

Other interviewees did not perceive insurance requirements as a barrier to pursuing or obtaining business opportunities. [Interviewees #: 1, 2, 3, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 21, 22, 23, 25, 26, 27, 28, 29, 32, 33, 34, 35, 36, 40, 41, 43, 47, TA #1, TA #3, TA #4, TA #5, TA #6, TA #7]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, said that insurance requirements and obtaining insurance are not barriers "as far as worker's compensation and general liability."

Interviewee #22, a Caucasian male owner of a non-certified aerial mapping firm, reported that getting personal liability insurance was "easy to get."

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that he does not believe insurance to be a barrier, he has not experienced it personally, and, therefore, he does not believe discrimination is a factor.

Interviewee #33, the Caucasian male president of an engineering firm, stated that he is not aware that insurance requirements and obtaining insurance are barriers for firms. He said that insurance is simply a business expense for which you plan. He stated that his firm has not faced any barriers in this area and does not believe discrimination is a factor.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that he is not aware of insurance requirements or obtaining insurance being a potential barrier for firms. He added that he has not had any personal experience with insurance requirements or obtaining insurance being a barrier.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that insurance is not a barrier for his clients, and he does not believe discrimination is a factor.

Interviewee TA #6, the president of a minority business development agency, reported that he does not believe that insurance requirements or obtaining insurance are barriers for firms; he indicated that his clients have no personal experience with the potential barrier.

D. Equipment.

Some interviewees identified access to equipment as a barrier to pursuing business opportunities. [Interviewees #: 7, 9, 19, 29, 32, 34, 37, 42, 43, 44, 45, TA #6, TA #7, TA #9, TA #10]. Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that this can be a barrier when companies have to wait a substantial amount of time for payment, because small companies cannot maintain the equipment leases while they are waiting to get paid for work that has already been completed. He noted that equipment leasing companies have very

strict credit requirements, and "it is like pulling teeth to get them to agree to do a very small lease on equipment for a start-up company." He said that he does not think that this barrier is based on discrimination and is, instead, "based on financial capability."

Interviewee #9, the African American owner of a non-certified trucking company, said that this could be a big barrier, but he does not think that there is any discrimination involved.

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned bridge design engineering firm, reported that he was unfamiliar with issues related to access to equipment, but noted that the economy generally made this a potential barrier. He said that it would appear to apply to everyone across the board.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that he believes that access to equipment could be a barrier for firms and he believes discrimination is a factor.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that she is aware that access to equipment could be a barrier if it relates back to financing, but she has not had any personal experiences with this barrier, and she believes it could be based on discrimination.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm, stated that he is aware that access to equipment is a barrier for firms and he has had personal experiences with having the necessary equipment being a barrier for his firm, but he does not believe the barrier to be based on discrimination.

Interviewee #37, the African American male owner of an engineering firm, stated that he is aware that access to equipment is a barrier for firms because it is associated with money. He said that he believes discrimination contributes to equipment is a barrier, but it relates more to financing for the equipment.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that she is aware of access to equipment being a potential barrier for firms. She said that she has not had any personal experience with access to equipment being a barrier for the firm, but she noted that she believes that gender discrimination contributes to the barrier because many vendors and business do not believe women are capable of managing companies and purchasing equipment.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that they are aware access to equipment can be a potential barrier for firms. Interviewee #43 stated that they do not believe discrimination contributes to this being a potential barrier but, rather, the barrier is based on finances.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that he is aware access to equipment is a potential barrier for firms. Interviewee #45 stated that he has had personal experience with access to equipment being a barrier and he believes discrimination contributes to the barrier. Interviewee #45 stated that he was charged a higher price for a part for his equipment than a majority contractor was charged for the same part.

Interviewee TA #6, the president of a minority business development agency, said that he is aware of access to equipment being a barrier and that his clients have reported personal experience with this barrier based on discrimination.

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that she is aware of access to equipment being a problem for her clients, that they have had personal experiences with this barrier, and that she believes that gender, race, and ethnicity contribute to this barrier.

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that she is aware that access to equipment is a barrier for firms. She stated that her clients have had personal experience with this barrier but she does not believe discrimination is a contributing factor.

Other interviewees indicated that they did not perceive access to equipment as a barrier to pursuing or obtaining business opportunities. [Interviewees #: 2, 3, 4, 5, 6, 8, 10, 11, 12, 13, 14, 15, 16, 17, 18, 20, 21, 23, 25, 26, 27, 28, 30, 31, 33, 35, 36, 38, 39, 40, 41, 46, 47, 48, TA #1, TA #2, TA #3, TA #4, TA #5]. Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, reported that he does not believe that obtaining equipment is a barrier to pursuing or engaging in business. He stated that if you have the money in hand, you are able to rent equipment, which is what he did when he started his firm, and still does today.

E. Labor and personnel.

Some interviewees perceived access to labor and personnel as a barrier to pursuing business opportunities. [Interviewees #: 7, 11, 20, 21, 25, 27, 28, 29, 30, 31, 34, 36, 39, 40, 42, 43, 44, 48, TA #1, TA #4, TA #5, TA #7, TA #9, TA #10]. Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that access to labor and personnel is a national problem. He said that this problem effects large and small companies. He noted, "If you're looking for people that have a lot of construction experience, that are white collar engineering, mechanical engineering, civil engineering, program management-type of people, I imagine it's going to be a lot harder for a small minority company to access that ... because they're not going to be able to pay the required salaries. General labor is a pool issue, and it's a constant problem because there seems to be a very high rate of turnover." He said that he does not think that this barrier is based on discrimination and that it is, instead, based on "financial capability."

Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, reported that one of the bidding problems is with undocumented workers. He noted that he is constantly undercut by those who hire illegal immigrants. He reported that he does not hire illegal immigrants, so he has to pay higher wages.

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, said that obtaining quality people to supervise is a barrier, but it is not discriminatory.

Interviewee #25, the Hispanic male owner of a DBE-certified construction firm, stated that he consistently has trouble "finding and keeping good people." He also stated that he loses at least two people per year, but he does not view discrimination as a cause.

Interviewee #27, the Caucasian female owner of a DBE-certified erosion control firm, reported that personnel and labor issues are not a problem or barrier for her now, but they were at start-up. She further stated that she did not believe discrimination contributed to this initial barrier.

Interviewee #28, the Native American female president of a trucking and excavating firm, stated that she is aware personnel and labor is a barrier for firms. Interviewee #28 stated that her firm has had problems finding the right person to work but she does not believe discrimination contributed to personnel and labor being a barrier.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that personnel and labor and high turnover can be a barrier until a firm is able to retain long-term, well-trained employees, but he does not believe it to be a barrier based on discrimination. He reported that he had not had personal experience with this barrier.

Interviewee #30, the Caucasian male co-owner of a transportation firm, stated that he is aware of the fact and believes that personnel and labor is a potential barrier for firms because he has experienced it personally in his firm, but he does not believe the barrier to be based on discrimination.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated that she is aware that personnel and labor and "keeping good, qualified people" is a barrier for firms because her firm has had personal experience with this barrier in the past. She stated that she does not believe that discrimination contributes to the barrier.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm stated that he is aware that access to personnel and labor is a barrier for firms. He stated that he has had personal experiences with this barrier and said, "We couldn't find enough people," but he does not believe that these problems are based on discrimination.

Interviewee #36, a Caucasian female senior engineer of an engineering firm stated that personnel and labor could always be a barrier for firms but she does not believe discrimination is a factor. She stated that she has had personal experience with access to personnel and labor being a barrier and has had problems finding the right personnel in the past.

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that she is aware access to personnel and labor is a potential barrier for firms. Interviewee #39 stated that the firm is having a hard time finding skilled laborers right now, but she does not believe discrimination contributes to this barrier; rather, it is based on the current market conditions.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that he is aware that access to personnel and labor are potential barriers for firms. He added that the firm had not had any personal experience with these barriers, but he said that he believes discrimination contributes to the potential barriers.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, reported that she is aware of access to personnel and labor being a potential

barrier for firms. She said that the firm has had problems finding and keeping skilled labors, but she does not believe that discrimination contributes to the potential barrier.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that they are aware that access to personnel and labor is a potential barrier for firms. Interviewee #43 does not believe discrimination contributes to the potential barrier.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that they are aware access to personnel and labor is a barrier for firms. Interviewee #44 stated that when the firm is not working regularly, it becomes hard to hold on to good workers. Interviewee #44 stated that they believe discrimination contributes to this barrier. He stated, "You can't get a job because you're [African American]. If you can't get a job you can't pay [your employees]."

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that he is aware that access to personnel and labor is a barrier for firms. He stated that he has to screen 20 people to find the right one. He stated that discrimination does not contribute to the barrier.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, stated that several years ago "the entire industry was having trouble finding workers" because the economy was thriving and a lot of people were busy working in the private sector building homes and shopping centers.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, reported, "On the professional side, there is a limitation as far as who's available and whether or not [they're] willing to come to work for you, but again ... I think that goes back to the whole networking thing.... If you ... become a familiar commodity to these professionals, then I think you're going to find people that want to work with you or work for you."

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that "getting and keeping good people" is a barrier and probably one of the most frustrating aspects of small business, but he does not believe that it is related to discrimination.

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that obtaining good-quality personnel is hard because those employees can always go off and start their own company.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that he is aware that access to personnel and labor is a barrier for firms because turnover will hurt any business. He stated that finances directly affect the ability to hire and maintain a labor force because if a firm does not have enough work to keep a constant labor force busy, the workers will go other places; firms need to have a constant stream of work.

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that she is aware that access to personnel and labor is a barrier for firms. She stated that her clients have had personal experience with this barrier and she believes discrimination contributes to this barrier for firms.

Other interviewees perceived no barriers in connection with access to labor and personnel. [Interviewees #: 1, 2, 3, 4, 5, 6, 8, 9, 12, 13, 14, 15, 17, 18, 19, 22, 23, 26, 32, 33, 35, 37, 38, 41, 45, 46, 47, TA #2, TA #3, TA #6]. Interviewee #1, the Caucasian male chief financial officer of a Caucasian male-owned heavy highway and bridge construction firm, stated that access to personnel and labor is no more of a barrier to one firm than it is to another.

Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, reported that access to personnel and labor is not a barrier to pursuing or engaging in business because there are always people looking for work.

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned bridge design engineering firm, said that his firm did not have experience with this potential barrier and that his firm had no trouble finding people to work.

Interviewee #22, the Caucasian male owner of a non-certified aerial mapping firm, reported he has been fortunate in finding employees in the past. He also reported that these employees were individuals that he had past experience working with.

F. Working with unions.

Some interviewees perceived working with unions as a barrier to pursuing business opportunities. [Interviewees #: 3, 7, 11, 14, 30, 31, 33]. Interviewee #3, the Caucasian male president of a civil engineering firm, reported having awareness of some "union-type activities" and said that "unions are always a problem.... Any time that unions are involved in our construction projects it costs more money because the contractors have more risk." Interviewee #3 compared union activity to situations in the construction industry that he has observed where the DBE subcontractor tries to take advantage of the system and will use any excuse to file a lawsuit or a grievance.

Interviewee #7, the Native American owner of a federally-certified aerospace firm, reported working with unions "makes life a lot more difficult because ... the level of benefits, the level of requirements are much higher, ... so the cost structures are higher, ... so the pricing has to be different." He stated that there is also a grievance process associated with unions. He commented that companies must be aware of the union agreement and be conscious of the need to "develop a relationship with the union" in order to avoid getting into some "serious dispute issues." He said that he does not think that discrimination is involved in this barrier.

Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, said that he has tried to work with a union, but there are too many rules and regulations, and it was too expensive for him.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, said that he has not faced any problems with unions recently because

unions are not very strong in Oklahoma. He stated that in the distant past, he did face problems with unions because they discriminated against non-union companies.

Interviewee #30, the Caucasian male co-owner of a transportation firm, stated that he is aware that working with unions could be a barrier for firms. However, he stated that he has not had any personal experience with unions acting as a barrier, and he reported that he does not believe discrimination contributes to unions as a potential barrier for firms.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated that she is aware that unions are a barrier for firms. She stated that she does not have any personal experience with unions as a barrier. Interviewee #31 stated that she does not believe discrimination contributes to unions being a potential barrier for firms.

Interviewee #33, the Caucasian male president of an engineering firm, stated that he is aware that working with unions is a barrier for larger companies. He stated that his firm has not faced any problems in this area and does not believe discrimination is a factor.

Other interviewees reported that working with unions does not pose a barrier to pursuing or obtaining business opportunities. [Interviewees #: 1, 2, 10, 18, 19, 20, 21, 23, 26, 27, 28, 32, 34, 35, 36, 37, 41, 42, 44, 46, 47, 48, TA #1, TA #2, TA #5, TA #6, TA #7, TA #9, TA #10]. Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, said that working with unions does not pose a barrier. He commented that "There [are] not very many [unions] here in Oklahoma."

Interviewee #41, the Hispanic male owner of a DBE-certified trucking firm, stated that he is not aware that working with unions is a potential barrier for firms. He noted, though, that the firm has not had any experience with unions.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that she was not aware of working with unions being a potential barrier for firms, adding that unions are a non-factor in Oklahoma and, therefore, the firm had not had any personal experience with them.

Interviewee #46, the African American male owner of a DBE-certified safety and environmental consulting firm, stated that he is not aware that working with unions is a barrier for firms. He stated that his firm has worked on one project with a union and it has not been a factor for his firm.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, said that Oklahoma is a "Right to Work state" and they do not have a union issue.

Interviewee TA #5, an organization providing outreach to Native American business owners and other minority businesses, stated that he does not believe working with unions to be a barrier for his clients, because Oklahoma is a "Right to Work state."

Other interviewees reported that they did not have experience working with unions and therefore do not know whether working with unions poses a barrier to pursuing business opportunities. [Interviewees #: 4, 6, 12, 15, 16, 17, 22, 25, 29, 38, 39, 40, 43, 45]. Interviewee

#6, the African American owner of a DBE-certified trucking company, reported that he has not heard of any problems concerning unions, but he noted that he has "very little knowledge" concerning unions.

Interviewee #15, the Caucasian male co-owner and manager of an engineering firm, reported that he has not worked with unions as an engineer. However, he did say that every job he does for the City "is going through union people technically." He said that he has no experience, though, positive or negative.

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that he was "not union" and did not know of any barriers in this regard.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that he is not aware of working with unions being a potential barrier for firms, but he noted that the firm has not had any experience with unions.

G. Being a union or a non-union employer.

Some interviewees reported that being a union or non-union employer could be a barrier to pursuing or obtaining work in the local marketplace. [Interviewees #: 30, 32, 34, 37, 42, 44]. Interviewee #30, the Caucasian male co-owner of a transportation firm, said that he is aware that being a union or non-union employer is a barrier for firms. He stated that he has had personal experience being a union employer. He reported that he "joined the Teamsters Union in order to deliver some freight to the longshoremen in California." He stated that being a union employer could be a barrier for firms "because you have to join to be able to work." Interviewee #30 does not believe being a union or non-union employer to be a barrier based on discrimination.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that she is aware and believes that being a union or non-union employers is a barrier for firms. She stated that she has had experience with this problem, as there are contracts that require you to pay union rates, but she does not believe the barrier to be based on discrimination.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm, stated that he is aware that being a union or non-union employers is a problem for firms, "particularly in this economy." He stated, "If you were a union employer you [would] have all the dues to pay and it would throw you out of the [competitive] bid process." Interviewee #34 stated that he had not experienced this barrier personally and does not believe the barrier to be based on discrimination.

Interviewee #37, the African American male owner of an engineering firm, stated that he is aware that being a union or non-union employers could be a barrier for firms and could be based on discrimination.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that she is aware that being a union or non-union employer can be a barrier for firms. However, she said that the firm has not had any personal experience with being a union or non-union employer, and that she does not believe that discrimination contributes to the potential barrier.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that they are aware that being a union or non-union employer can be a barrier for firms. They stated that they have worked as a subcontractor on a union project and had to pay union rates for all their workers. They stated that they believe union pay rates can be a barrier but that the barrier is not based on discrimination.

Other interviewees reported that being a union or a non-union employer does not create a barrier to pursuing or obtaining work in the local marketplace. [Interviewees #: 1, 2, 5, 9, 11, 18, 19, 20, 21, 23, 26, 27, 28, 33, 35, 43, 46, 47, 48, TA #1, TA #2, TA #3, TA #5, TA #6, TA #7, TA #9, TA #10]. Interviewee #33, the Caucasian male president of an engineering firm, stated that he is not aware that being a union or non-union employer is a barrier for firms, particularly engineering firms. He stated that his firm has not faced any problems in this area and does not believe discrimination is a factor.

Interviewee TA #5, an organization providing outreach to Native American business owners and other minority businesses, stated that he is not aware of being a union or non union employer as a potential barrier based on his client's experiences, and he does not have any personal experience.

Other interviewees reported that they do not have experience with unions and therefore do not know whether being a union or a non-union employer poses a barrier to pursuing business opportunities. [Interviewees #: 4, 6, 12, 16, 17, 29, 31, 36, 38, 39, 40, 41, 45]. Interviewee #6, the African American owner of a DBE-certified trucking company, reported that he has not heard of any problems concerning unions, but he noted that he has "very little knowledge" concerning unions.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated that she is aware that being a union or non-union employer could be a barrier for firms in certain industries. She stated that, as a small company, she has not personally experienced being a union or non-union employer as a barrier and does not believe this discrimination is a contributing factor.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that he is not aware that being a union or non-union employer is a potential barrier for firms, but he noted that the firm has not had any personal experience with being a union or non-union employer.

Interviewee #41, the Hispanic male owner of a DBE-certified trucking firm, said that he is not aware of being a union or non-union employer being a potential barrier for firms. He noted, though, that the firm has not had any personal experience with being a union or non-union employer.

H. Obtaining inventory or other amterials and supplies.

Some interviewees identified obtaining inventory and other materials and supplies as a barrier to pursuing business opportunities. [Interviewees #: 4, 7, 26, 31, 37, 43, 44, 45, 48, TA #2, TA #3, TA #6, TA #7, TA #9, TA #10]. Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, reported that access to inventory or supplies can be a barrier to pursuing or engaging in business if the firm does not have adequate money.

Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that start-up businesses may pay a higher price than established companies for goods and services due to the financial risk involved.

Interviewee #26, a supervising manager of a Caucasian-owned construction firm, stated that getting paid on time by primes can affect their relationships with suppliers. He stated that being behind on payments to suppliers can hurt other current and future jobs.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated that she is aware that obtaining inventory, materials, and supplies is a potential barrier for firms. She stated that she does not have any personal experience with obtaining inventory, materials, and supplies as a barrier. Interviewee #31 stated that she does not believe discrimination contributes to this potential barrier.

Interviewee #37, the African American male owner of an engineering firm, stated that he is aware that obtaining inventory, materials or supplies is a barrier for firms. He reported that what he has heard and seen is that getting materials and supplies is dependent upon your relationship with the supplier and if the firm is new, a start-up, or minority, or the supplier does not know the firm, the firm may not get the terms or pricing that others might get. He stated that he believes discrimination contributes to the barrier of obtaining inventory, materials or supplies.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that they are aware obtaining inventory or other materials and supplies is a potential barrier for firms. Interviewee #43 stated that the firm has not had any personal experience in this area and does not believe discrimination contributes to this being a potential barrier for firms.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that they are aware that obtaining inventory or other materials and supplies is a barrier for firms. Interviewee #44 stated that the firm has had personal experience in this area because they have had to pay higher prices for asphalt and believe discrimination contributes to this being a barrier for firms. He stated, "[African American] firms pay higher prices than [Caucasian ones]."

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that he is aware that obtaining inventory or other materials and supplies is a potential barrier for firms. Interviewee #45 stated that the firm has had personal experience in this area and believes that the barrier is related to discrimination because everything costs more for minorities.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that he is aware that obtaining inventory, materials or supplies is a barrier for firms. He stated that acquiring lines of credit and establishing credit is difficult for established firms and is especially hard for start-up companies. He stated that he does not believe discrimination contributes to the barrier.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that obtaining inventory and other supplies could be a barrier because of credit restrictions, but he does not think that discrimination is involved.

Interviewee TA #6, the president of a minority business development agency, reported that he was aware that obtaining inventory or other materials and supplies is a barrier for firms. He stated that his clients have experienced this barrier, but he indicated that he does not believe that the barrier is based on discrimination but, instead, thinks that it is based on capability and the inability to buy in bulk. Interviewee TA #6 stated that firms that cannot buy in bulk will not be competitive because they are going to be overpriced.

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that she is aware of this being a problem for her clients and that they have had personal experiences with this barrier.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that he is aware that obtaining inventory or other materials and supplies is a barrier for firms, particularly for firms just starting in business. He believes that discrimination indirectly contributes to obtaining inventory or other materials and supplies being a barrier if other barriers keep the firm from making money and growing.

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that she is aware that obtaining inventory or other materials and supplies is a barrier for firms, but she does not believe discrimination contributes to this barrier.

Other interviewees reported that they did not perceive obtaining inventory and other materials and supplies as a barrier to pursuing or obtaining business opportunities. [Interviewees #: 1, 2, 3, 5, 6, 8, 9, 10, 11, 17, 18, 19, 20, 21, 23, 25, 27, 28, 30, 32, 33, 34, 35, 36, 38, 39, 40, 41, 42, 46, 47, TA #1, TA #4].

I. Prequalification requirements.

Some interviewees identified prequalification requirements as a barrier to pursuing business opportunities. [Interviewees #: 4, 7, 19, 20, 31, 34, 37, 39, 42, 43, 44, 45, TA #2, TA #3, TA #5, TA #7, TA #9, TA #10]. Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that prequalification requirements have in the past presented a barrier to his firm. He stated that if you are not prequalified with the City, you cannot work as a prime contractor. However, Interviewee #4 reported that he does not believe that prequalification requirements involve discrimination.

Interviewee #7, the Native American owner of a federally-certified aerospace firm, reported that prequalification requirements can be a barrier when "companies are not prepared for what's going to be expected of them."

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned bridge design engineering firm, stated that the standards for prequalification could pose a potential barrier, but that they would apply to everyone equally.

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, said that prequalification requirements are a barrier that his company has had experience with, but that it is not discriminatory.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated that she is aware and believes prequalification requirements are potential barriers for firms. She stated that some of the prequalification requirements are "tedious." She stated that the government creates the barrier because the government requires companies to use minority firms instead of assessing the quality of each company. Interviewee #31 stated that she has had personal experience with prequalification requirements being a barrier for her firm. She stated that she does not believe discrimination contributes to the prequalification requirements barrier.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm stated that he is aware that prequalification requirements are a barrier for firms and he has had personal experience with this barrier but does not believe discrimination contributes to the barrier.

Interviewee #37, the African American male owner of an engineering firm, stated that he is aware that prequalification requirements are a barrier for firms. He commented that he has not had personal experiences with this barrier and does not believe discrimination contributes to the barrier. He stated, "Prequalification many times is based on financial capabilities and not so much on your ability to get the work done. People who have less net worth are going to fare worse than people that have a lot of net worth, but it may not impact their ability to get the job."

Interviewee #38, the Native American female president of an engineering firm, stated that the firm has never been rejected based on prequalification. She stated that she does not believe discrimination contributes to prequalification requirements being a barrier but rather on broad policies being applied.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that she is aware that prequalification requirements are a potential barrier for firms. She said that the firm has not had any personal experience with this barrier, and she does not believe discrimination contributes to prequalification requirements being a barrier.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that they are aware prequalification requirements are a barrier to becoming a prime contractor. Interviewee #43 stated that in order for the firm to meet the prequalification requirements to become a prime contractor, the firm needs to have audited financial statements.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that he is aware that prequalification requirements are a potential barrier for firms because of the requirement of prior experience, but minority firms never get the opportunity to work so they cannot develop any experience. Interviewee #45 stated that the firm has had personal experience with prequalification requirements being a barrier and believes discrimination contributes to the barrier.

Interviewee TA #2, the executive director of a Hispanic trade association, said that prequalification requirements can be difficult, but he does not think that discrimination is involved.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, stated that prequalification requirements are a major barrier, and he thinks that discrimination against small businesses may be involved.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, reported that he believes prequalification requirements may be a potential barrier when it relates to bonding capacity, which relates back to financial capacity. He reported that he had not experienced this and does not feel like he can attribute this factor to any discrimination.

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that she is aware of prequalification requirements being a problem for her clients and that they have had personal experiences with this barrier, but she did not indicate whether they believe race contributes to the barrier.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that he is aware of prequalification requirements being a barrier for firms. He stated that stringent prequalification criteria particularly impacts minority firms. He stated that he believes discrimination contributes to prequalification requirements being a barrier.

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that she is aware of prequalification requirements being a barrier for firms. She stated that her clients have had personal experience with prequalification requirements being a barrier and she believes discrimination contributes to the barrier.

Other interviewees identified no barriers in connection with prequalification requirements. [Interviewees #: 1, 2, 3, 5, 6, 8, 9, 10, 11, 12, 13, 15, 16, 17, 18, 21, 23, 25, 26, 27, 28, 30, 32, 33, 35, 38, 40, 41, 46, 47, 48, TA #1, TA #4, TA #6]. Interviewee #1, the Caucasian male chief financial officer of a Caucasian male-owned heavy highway and bridge construction firm, stated that information related to ODOT's prequalification requirements is available online and the ODOT staff are happy to assist.

Interviewee #3, the Caucasian male president of a civil engineering firm, said, "I don't really see [prequalification requirements] as a barrier. It is very simple to get prequalified."

Interviewee #8, the African American president and owner of a civil and structural engineering firm, said that prequalification requirements are not a problem when you register with a public agency and get on their list.

Interviewee #12, the owner of a female-owned non-certified civil engineering and land surveying firm, said that in "Oklahoma City, they have a list of qualified engineers that they issue requests for proposals," and he is on that list. He added, "I think ODOT also has something similar to that," but he is not on ODOT's list. He said that he obtained his qualification with Oklahoma City's list by "furnishing a resume of the company and resumes of our professional employees."

Interviewee #30, the Caucasian male co-owner of a transportation firm, stated that he is not aware of prequalification requirements being potential barriers for firms. He stated that "all companies

should be prepared to show that they can do the work." Interviewee #30 stated he has no personal experience with prequalification requirements as a barrier.

Interviewee #33, the Caucasian male president of an engineering firm, stated that he does not believe that prequalification requirements are a barrier for firms if they are prepared to do business. He stated that his firm has not faced any problems in this area and does not believe discrimination is a factor.

J. Experience and expertise.

Some interviewees identified experience and expertise as a barrier to pursuing business opportunities. [Interviewees #: 7, 11, 19, 28, 31, 32, 33, 36, 38, 39, 40, 42, 43, 44, 45, 46, 48, TA #2, TA #3, TA #5, TA #6, TA #9, TA #10]. Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that this is a "big issue." He noted that some people start a business with plenty of construction experience but not much experience with contracting and bidding. He said that this barrier is not based on discrimination.

Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, said that some of the things they need to learn require them to attend more training. He said that negotiating the business part of the company is very difficult and takes a lot of work.

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned bridge design engineering firm, said that experience poses a barrier that his firm has experienced because ODOT has its own requirements.

Interviewee #28, the Native American female president of a trucking and excavating firm, stated that she is aware that experience and expertise could be a barrier for firms. She stated that experience and expertise have not been barriers for her firm and she does not believe discrimination contributes to this barrier for firms.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated that she is aware that experience and expertise are barriers for firms, particularly for new firms, because "companies like ours have already developed clientele, and the competition is pretty stiff." She reported that she has not had personal experience with expertise being a barrier for her firm and she does not believe discrimination contributes to this being a barrier for firms.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that she is aware and believes experience and expertise could be barriers for firms, although her firm has not had any personal experience with the barrier. She stated that she believes that discrimination contributes to the potential barrier.

Interviewee #33, the Caucasian male president of an engineering firm, stated that he is aware that experience and expertise could be barriers for firms because firms need to be qualified. He stated that his firm has not faced any problems in this area and does not believe discrimination is a factor.

Interviewee #36, a Caucasian female senior engineer of an engineering firm, stated that she is aware that experience and expertise can be barriers for firms. She stated that initially experience and

expertise were barriers for her Tulsa Office. She said that discrimination did not contribute to experience and expertise being a barrier. She stated, "When you're trying to do work for ODOT or for the public, they want to know if you've done that kind of work before."

Interviewee #38, the Native American female president of an engineering firm, stated that she is aware that experience and expertise are potential barriers for firms. She stated that the firm has personal experience with this barrier and she does believe discrimination contributes to this barrier. She stated that some of the points available in the selection process are based on past experience and if a small company is not given the opportunity to perform work, they will never get the needed experience.

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that she is aware experience and expertise are barriers for firms. She stated that the firm has not had any personal experience with this, though, and does not believe discrimination contributes to the potential barrier.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that he is aware that experience and expertise are potential barriers for firms because people may not have the initiative to take advantage of opportunities in order to gain the needed experience and expertise. He added that his firm has not had any personal experience with experience and expertise being barriers.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that she is aware of experience and expertise being potential barriers for firms, and added that initially discrimination may have contributed to experience and expertise being barriers for the firm. She stated that her firm has not had any personal experience with this barrier.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that that they are aware of experience and expertise being potential barriers for firms. Interviewee #43 stated that for a firm starting out and trying to get involved in the business, getting experience can be a real barrier because no one wants to hire someone with no experience. Interviewee #43 does not believe discrimination contributes to this potential barrier for firms.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that the firm has had personal situations where experience and expertise were barriers for the firm. Interviewee #44 stated, "They give the [African American] firms the hardest part of the construction project believing you can't do it. When they have difficult work they will call the [African American] firms to do the hard work, but we can do it. This is based on discrimination."

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that he is aware experience and expertise are potential barriers for firms. He stated that minority firms never get the opportunity to show their expertise. He stated that the firm has had personal experience with this barrier and believes discrimination contributes to the barrier for firms

Interviewee #46, the African American male owner of a DBE-certified safety and environmental consulting firm, stated that he is not aware that expertise is a barrier but believes experience is a

barrier for firms. He stated that when he started he had the expertise but did not have the experience and track record of performing projects. He stated that he has seen other similarly-situated firms that have grown because they were given the opportunity to do jobs, and his firm has not been given the opportunities needed to grow. He said that he could not state if discrimination was the factor that has prevented his firm from gaining the needed experience to grow.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that he has had personal experiences with expertise or experience being barriers when he was expanding into new areas, but he does not believe the barrier was based on discrimination.

Interviewee TA #2, the executive director of a Hispanic trade association, said that this can be a barrier because if a company does not have experience or a work record, they will not be hired. He said that he does not think that this is based on discrimination.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that this may be a barrier because ODOT may tend to overlook someone's experience or expertise if they do not meet the prequalifications. He added that it is hard for companies to gain experience if they are not given a chance.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that expertise and experience are potential barriers for his clients, but he said that he is not aware of this being based on discrimination.

Interviewee TA #6, the president of a minority business development agency, reported that expertise or experience could be barriers depending on how experience is defined. He stated that firms just starting out or trying to grow or stay in business probably will not be experienced at performing the scope of work required for a million dollar contract. He stated that his clients have experienced this barrier but that it is not based on discrimination.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that he is aware expertise or experience is a barrier for firms. Interviewee TA #9 stated that he believes discrimination contributes to expertise or experience being a barrier for firms because the small firms want to continue to grow and gain experience and expertise, and they can only do that if they have opportunities.

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that her clients have had personal experience with expertise and experience being and barrier and she believes discrimination contributes to this barrier.

Other interviewees indicated that experience or expertise is not a barrier to pursuing or engaging in business opportunities. [Interviewees #: 1, 2, 3, 4, 5, 6, 8, 9, 17, 18, 20, 21, 23, 25, 26, 27, 29, 30, 34, 35, 37, 41, 47, TA #1, TA #7]. Interviewee #1, the Caucasian male chief financial officer of a Caucasian male-owned heavy highway and bridge construction firm, stated that people will know if you are good at what you do.

Interviewee #3, the Caucasian male president of a civil engineering firm, said that he does not see lack of experience or expertise as a barrier, "but maybe it should be."

Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, reported that experience and expertise is not a barrier to pursuing or engaging in business because whoever wants to learn their field can learn their field.

Interviewee #6, the African American owner of a DBE-certified trucking company, said, "You hear a lot of people complain about that issue, but it's due to people not" working hard to establish relationships or to learn "what they need to know about the prime." He said that he does not believe discrimination is involved.

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that "if you have experience, I do not know why you would be discriminated against."

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm stated that he does not see experience and expertise as barriers for firms. He stated that he has not had personal experience with these areas.

K. Licenses and permits.

Some interviewees identified obtaining licensing and permits as a barrier to pursuing business opportunities. [Interviewees #: 7, 40, 42, 46, TA #2, TA #10]. Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that this is a barrier if you do not know what is involved in getting licenses or certifications. He said that some really qualified people just do not know what the business requirements are. He stated that he was not aware of discrimination being involved.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that he is aware that licenses and permits are potential barriers for firms because people are not committed to their work. He added that the firm has not had any personal experience in this area but that he does believe that discrimination contributes to licenses and permits being a barrier.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that she is aware of licenses and permits being potential barriers for firms because there are related fees and costs, and, initially, a firm may not have the funds needed. She added that the firm has not had any personal experience in this area and does not believe discrimination contributes to this barrier.

Interviewee #46, the African American male owner of a DBE-certified safety and environmental consulting firm, stated that when he started his firm licenses and permits were barriers. He stated that discrimination contributes to this being a barrier for firms.

Interviewee TA #2, the executive director of a Hispanic trade association, said that obtaining licenses is a barrier for small firms and is related to a language barrier.

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that her clients have had personal experience with licenses or permits being barriers, but she does not believe discrimination is a factor.

Other interviewees indicated that they did not perceive obtaining licensing and permits as a barrier to pursuing or engaging in business opportunities. [Interviewees #: 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 41, 43, 44, 45, 47, 48, TA #1, TA #3, TA #4, TA #5, TA #6, TA #7, TA #9]. Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that it is a little bit difficult to complete the paperwork for licenses, but he completed the paperwork on his own and was able to obtain the licenses necessary for his business. Interviewee #4 reported that he does not believe that there is discrimination associated with obtaining licenses.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, reported that Oklahoma does not have a licensing program, so he has not needed to obtain a license for contracting. He noted that his work outside of Oklahoma has all been on federal installations, and licensing was not germane to where he was working.

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned bridge design engineering firm, said that all engineers need to be licensed, but that is a good thing.

Interviewee #22, the Caucasian male owner of a non-certified aerial mapping firm, reported that he has experienced no problems in achieving or maintaining his certifications and licenses.

Interviewee #33, the Caucasian male president of an engineering firm, stated that he is not aware that licenses and permits are barriers for firms. He stated that his firm has not faced any problems in this area and does not believe discrimination is a factor. He stated, "All companies know that they have to be properly licensed in order to do business."

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, said that "when we have to do a job quickly," it can sometimes be difficult to obtain all of the necessary licenses and permits; however, this would only act as a delay to completing work as opposed to a barrier in general. He indicated that discrimination was not involved.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated licenses and permits are not potential barriers. He stated, "Firms either have the experience, have gone through the licensing, possess the educational experience [or they don't], and, therefore, the requirement is not based on discrimination."

L. Notification of work opportunities / marketing.

Some interviewees identified notification of work opportunities and marketing as a barrier to pursuing business opportunities. [Interviewees #: 4, 6, 7, 9, 14, 29, 34, 38, 39, 40, 42, 43, 44, 46, 47, TA #2, TA #5, TA #6, TA #7, TA #9, TA #10]. Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, said that if a firm does not know about work opportunities and does not have someone to guide them or tell them about such opportunities, that could pose as a barrier to the firm. He stated that this was never a barrier for his firm because he knew a lot of companies before he started his own firm, so the other companies were able to keep him informed of work opportunities. Interviewee #4 said that he would not attribute a firm's lack of knowledge of work opportunities to discrimination; rather, if a firm is not known to other businesses, those

businesses will not know whether the firm does good work (and presumably will not inform that firm of work opportunities).

Interviewee #6, the African American owner of a DBE-certified trucking company, said, "Some might have a problem learning about work, but it's just because they don't know where to look." Interviewee #6 said that he does not think that discrimination is involved.

Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that this is a barrier because "a lot of companies don't know how to market, and they don't have the resources to market." He stated, "I think a lot of really small businesses" are completely unaware of the basic marketing materials that they need such as websites, business cards, and basic marketing materials explaining their core competencies.

Interviewee #9, the African American owner of a non-certified trucking company, reported that ODOT "could do a better job of helping you learn" about opportunities. He added that it seems like no matter what, the same people end up with the work. He said that he was not sure whether discrimination was involved.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, stated that he has experienced barriers in learning about work or marketing. He said that he does think that it was based on his race because everything seemed fine on the phone, but when he appeared in person, the problems started. However, he said that the first 15 years of his career held more of these experiences than the last 15 years of his career. He said that conditions have "improved tremendously." He commented that in the last 10 years, people have begun to assume that he is Hispanic, and there is "strife in the culture in regard to Hispanics and that growing population, and as the economy has gotten worse ... it has accelerated some of that negativity" toward Hispanics.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that learning about work and marketing are big potential barriers for firms. He said that he has had personal experience with it being a stumbling block, and he does attribute the barrier to discrimination.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm stated that he is aware that learning about work and marketing can be barriers for firms "until you learn the system." Interviewee #34 stated that he has had personal experience with learning about work and marketing being a barrier for his firm initially, but he does not believe discrimination contributes to the potential barrier.

Interviewee #38, the Native American female president of an engineering firm, stated that she is aware that learning about work and marketing are potential barriers for firms. She reported that the firm has not had any personal experience with this barrier and she does not believe discrimination contributes to the barrier for firms.

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that she is aware learning about work or marketing are barriers for firms because marketing is very expensive. She said that she does not believe the barrier is related to discrimination.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, reported that he is aware that learning about work and marketing are potential barriers for firms. He reported that many firms are not aware that you can search the Internet to find out about work opportunities or receive e-mail notifications. He added that his firm has not had any personal experience in this area, but he believes discrimination contributes to learning about work and marketing being barriers for firms.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that that she is aware that learning about work and marketing are potential barriers for firms. She also said that she is sure that at times discrimination contributes to this barrier. She added that the firm has not had any personal experience in this area.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that they are aware that learning about work or marketing are potential barriers for firms because learning about work is hard for a company and marketing can be very expensive. Interviewee #43 stated that the firm has not had any personal experience with learning about work or marketing as barriers and does not believe discrimination contributes to the barrier for firms.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that they are aware that learning about work or marketing are potential barriers for firms. They stated that learning about work is a barrier based on discrimination and they have had difficulties learning about work and marketing.

Interviewee #46, the African American male owner of a DBE-certified safety and environmental consulting firm, stated that he is aware that learning about work and marketing can be barriers for firms, but does not believe that the barrier is related to discrimination.

Interviewee #47, the Caucasian female president of a WBE-certified trucking company, stated that she has personal experience with learning about work and marketing being barriers but she does not believe discrimination contributed to the barrier.

Interviewee TA #2, the executive director of a Hispanic trade association, said that this is a barrier, and "more information needs to be out in the Hispanic community in publications in Spanish and things of that nature." He said that he does not think that this is based on discrimination but is simply because there is not enough being done within the Hispanic community to help businesses.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that he believes learning about work and marketing to be potential barriers for firms, and that he does attribute the barrier to discrimination. He reported that his clients experience this daily, and this is a key problem that his organization seeks to resolve.

Interviewee TA #6, the president of a minority business development agency, reported that he was aware that learning about work and marketing are barriers for firms. He stated that his clients have personally experienced this barrier, but he does not believe that the barrier is based on discrimination. He stated that the barrier is based more on knowing how to market yourself and how to market your company. Interviewee TA #6 stated that his clients are so small that an advertising or marketing budget is probably the last thing on their list of business operations.

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that learning about work and marketing are barriers for firms. He reported that relative to other public sector work, it is harder to find out about and to obtain work on ODOT projects.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that he is aware that learning about work and marketing are barriers for firms. He stated that his clients have personally experienced this barrier and he believes cultural and economic discrimination contributes to learning about work and marketing being barriers.

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that she is aware that learning about work and marketing are barriers for firms. She stated that her clients have personally experienced this barrier. She stated that the minority firms are simply not getting the information because of the "Good Old Boy System" and those firms that are getting the information and contracts are the ones who will keep getting the information and contracts and they are not minorities. She stated that she believes discrimination contributes to the barrier.

Other interviewees indicated that they did not perceive notification of work opportunities and marketing as a barrier to pursuing or engaging in business opportunities. [Interviewees #: 1, 2, 3, 5, 8, 10, 11, 12, 13, 16, 17, 18, 19, 20, 21, 23, 25, 26, 27, 28, 30, 31, 32, 33, 35, 36, 37, 41, 45, 48, TA #1, TA #3]. Interviewee #1, the Caucasian male chief financial officer of a Caucasian male-owned heavy highway and bridge construction firm, stated that learning about work and marketing are not barriers because a firm can go to ODOT and pull plans.

Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, said that learning about work and marketing are "absolutely not" barriers.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated that she is not aware that learning about work and marketing are potential barriers for firms. She stated that she has not experienced learning about work or marketing as barriers for her firm. Interviewee #31 stated that she does not believe discrimination is a factor because "you can learn about anything you want to if you choose to."

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, said that there are no barriers related to learning about work because work opportunities are posted on ODOT's website. He also reported that his trade association and other trade associations publish lists of work opportunities for their members.

M. Contract specifications and bidding procedures.

Some interviewees identified unnecessarily restrictive contract specifications and bidding procedures as a barrier to pursuing business opportunities. [Interviewees #: 2, 4, 7, 10, 11, 20, 27, 29, 31, 33, 36, 37, 39, 40, 42, 44, 45, 48, TA #3, TA #4, TA #5, TA #7, TA #9]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, said that unnecessarily restrictive contract specifications and bidding procedures are not barriers to his firm because he is up-to-date on the laws and code regulations. He said that this could "very much" be a barrier, however, to other firms. He said the main issue is bonding requirements — he said that

"when you use the word 'bond'" in a contract you automatically "exclude most if not all DBE subcontractors."

Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, said that contract specifications and bidding procedures can be barriers depending on for whom the work is done. He explained that in the public sector, the City or ODOT cannot revoke or change a contract unless a problem exists. However, he said that in the private sector, a contract can be revoked or changed.

Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that this could be an issue because often "agencies don't understand their own contract procurement requirements.... They load up the contract with so many different things that" no one really knows what is required. He said that he does not think that discrimination is involved. He added that the problem is that the smaller businesses just do not have the expertise to navigate the contract.

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, said that "some contracts and bidding specifications that come through from [places other than ODOT] will be very tightly-written so that you know they're targeting a specific consultant, but because the dollar limit is too high, they can't just sole-source it."

Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, reported that he sometimes thinks that he encounters overly restrictive contract specifications based on discrimination.

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, said that restrictive contract specifications are a barrier that his company has had experience with, but it is not discriminatory.

Interviewee #27, the Caucasian female owner of a DBE-certified erosion control firm, stated unnecessarily restrictive contract specifications and bidding procedures are barriers. She stated that some contracts are punitive, but the firm does not have to take the work. She further stated that she does not believe any sort of discrimination factors into this barrier.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that he believes unnecessarily restrictive contract specifications and bidding procedures to be potential barriers that he has experienced, and he believes the barrier to be based on discrimination.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated that she is aware that unnecessarily restrictive contract specifications and bidding procedures are potential barriers for firms. She stated, "It shouldn't matter if you are a woman-owned or minority-owned business to get work. What should matter is [whether] you do good work, are you there when you say you're going to be there, and do you give a qualified bid." She stated she does not believe that discrimination contributes to unnecessarily restrictive contract specifications and bidding procedures being barriers for firms.

Interviewee #33, the Caucasian male president of an engineering firm, stated that he is aware that unnecessarily restrictive contract specifications and bidding procedures are barriers for firms. He stated that his firm has not had any problems in this area, but believes requiring DBE goals and DBE Programs are a form of reverse discrimination.

Interviewee #36, a Caucasian female senior engineer of an engineering firm, stated that she is aware that unnecessarily restrictive contract specifications and bidding procedures could be barriers for firms, but that the barrier is not based on discrimination. She stated that her firm typically writes specifications and they always try to include alternatives but not everyone does.

Interviewee #37, the African American male owner of an engineering firm, stated that he is aware that unnecessarily restrictive contract specifications and bidding procedures are barriers for firms. He stated that he has not had personal experience with this barrier but knows of others who have experienced this barrier and believes discrimination contributes to the problem.

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that she is aware that unnecessarily restrictive contract specifications and bidding procedures are barriers for firms. Interviewee #39 stated that the firm has had personal experience with unnecessarily restrictive bidding procedures and the firm refused to submit certain additional information and turned away from bids that required copies of their financials for the past three years. She stated that she does not believe the barrier is related to discrimination, but she does believe that smaller companies would have a hard time adhering to unnecessarily restrictive contract specifications and bidding procedures.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, reported that he is aware that unnecessarily restrictive contract specifications and bidding procedures can be potential barriers for firms. He added that the firm experienced unnecessarily restrictive specifications when the fine print of one of their contracts said that the agency was not responsible for payment on the project. He stated that he does believe discrimination contributes to the barrier.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that that she is aware of unnecessarily restrictive contract specifications and bidding procedures being potential barriers for firms. She added that the firm has had personal experience with this when contracts are too restrictive for the type of project being completed. She stated that she does believe discrimination contributes to this barrier.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that the firm has had personal experience with unnecessarily restrictive bidding procedures and believes discrimination contributes to the barrier.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that he is aware unnecessarily restrictive contract specifications and bidding procedures are potential barriers for firms. He stated that the bonding requirements make it impossible for small business and it is a mechanism to keep small businesses out of the arena. Interviewee #45 stated that the firm has had personal experience with unnecessarily restrictive specifications being a barrier but believes the barrier is directed toward small business and not based on racial or gender discrimination.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that he is aware that unnecessarily restrictive contract specifications and bidding procedures are barriers for small and uneducated companies. He stated that it takes some experience to be able to analyze and bid the projects that ODOT is awarding currently. He stated that new companies can make serious financial mistakes by bidding on projects if they do not understand the specifications

and everything that the contract requires of their company. Interviewee #48 stated that he has had personal experiences with this barrier but does not believe discrimination contributes to the barrier.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, reported that he thinks that this can sometimes be a barrier. He said that requiring bid bonds is a barrier to many small businesses that are already having trouble making ends meet. He stated that he thinks that this discriminates against small businesses but is not based on racial or gender discrimination.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, said that "there is a feeling that" in the private sector, "those specifications are put in place in order to weed you out ... because they don't want your business. Whether it's because you're a minority firm or it's because they've never worked with you before." He stated that the firms that he deals with do not come from "'golden-plate organizations.' They are hardworking people that have invested their resources and their heart and soul into it, and in most cases they're undercapitalized."

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that he believes unnecessarily restrictive contract specifications and bidding procedures are potential barriers, probably more in the private sector than the public sector, because the private sector tends to be more transparent. Interviewee TA #5 stated that he did not attribute the barrier to discrimination.

Other interviewees reported that unnecessarily restrictive contract specifications and bidding procedures do not pose a barrier to pursuing or obtaining business opportunities. [Interviewees #: 1, 3, 5, 6, 9, 12, 13, 16, 17, 18, 19, 21, 23, 25, 26, 28, 30, 32, 34, 35, 38, 41, 43, 46, 47, TA #1, TA #2, TA #6, TA #10]. Interviewee #35, the Native American female president of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated that she is not aware of unnecessarily restrictive contract specifications and bidding procedures being barriers for firms. She said the firm has not had any personal experience in this area because the firm has always been able to manage any contract specifications.

N. Bidding process.

Some interviewees reported that bidding processes and procedures pose barriers to pursuing or obtaining business opportunities. [Interviewees #: 7, 19, 37, 38, 39, 44, TA #2, TA #5, TA #7, TA #9, TA #10]. Interviewee #7, the Native American owner of a federally-certified aerospace firm, reported that the process can be cumbersome. He added that contract processes are often "only as good as the contracting officers administering them." He said that there is often a "lack of experience on the agency's side," and people simply do not know "how to respond to contractors and contract questions." He said that there is no discrimination involved.

Interviewee #37, the African American male owner of an engineering firm, stated that he is aware that the bidding process is a barrier for firms. Interviewee #37 stated, "[The] bidding process is the most overrated and misunderstood activity in business in Oklahoma." He stated, "The bidding process is not what people think it is. Okay. Anybody can bid on a job." He stated, "It has been discriminatory. It can be discriminatory. It is discriminatory. It is one of the biggest ways to exclude people because basically, if you're low bidder and the entity doing the bidding does not want to use

you, they [the entity doing the bidding] are not going to use you. You can have that piece of paper that says I bid less than this other person, then they will say 'it is the lowest and best bidder,' and then they go through the many, many reasons as to why you are not the best bidder." He reported that he has heard of many instances of agencies finding ways to throw out the bids and knows of people who met all the requirements and submitted the lowest bid and still did not get the work. He reported that if you continue to fight the agencies, the agencies will cancel the contract and rebid the project and then your numbers are out there for everyone to see.

Interviewee #38, the Native American female president of an engineering firm, stated that she is aware the bidding process is a potential barrier for firms. She stated that the firm has had personal experience with the selection process for professional services being a barrier and she does believe discrimination contributes to the selection process being a barrier.

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that she is aware the bidding process is a barrier for firms. Interviewee #39 stated that she fields a lot of calls asking for assistance with the bidding process and the administrative aspect of bidding, but she does not believe discrimination contributes to this barrier.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that that they are aware that the bidding process is a potential barrier for firms. Interviewee #44 stated that the firm has had personal experience with the bidding process being a barrier and believes discrimination contributes to the bidding process being a barrier for firms.

Interviewee TA #2, the executive director of a Hispanic trade association, said that the bidding process is a barrier. He commented that the organization's members may not get hired for opportunities due to lack of experience.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that the bidding process is a barrier. He reported seeing definite cases of discrimination based on race, ethnicity, and gender.

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that relative to other public sector work, ODOT's bid process is harder, noting that municipalities have better websites with more filtering capacity that are easier to navigate. She stated that the costs are higher in bidding with ODOT because the bidder needs to purchase plans. She added that it costs money to bid, and her clients have to submit several bids before they ever get a contract.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that he is aware the bid process is a barrier for firms. He stated that discrimination contributes to the bid process itself being a barrier because the trade associations have a lot of influence on the work opportunities made available by ODOT.

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that she is aware the bid process is a barrier for firms. She stated that her clients have had personal experience with the bid process being a stumbling block and she believes discrimination contributes to the bid process being a barrier for firms.

Other interviewees indicated that they did not perceive the bidding processes and procedures as barriers to pursuing or obtaining business opportunities. [Interviewees #: 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 17, 18, 20, 21, 23, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 41, 42, 43, 46, 47, 48, TA #1, TA #3, TA #4, TA #6]. Interviewee #6, the African American owner of a DBE-certified trucking company, stated that problems with the bidding process are often based on "a lack of knowledge. There's not a problem in the bidding process, but if you don't know how to bid or where you go and who to bid to," then you will have problems with the bidding process; but he said that this is not based on discrimination.

Interviewee #8, the African American president and owner of a civil and structural engineering firm, said that he experienced an issue with the selection process in the 1990s, but he does not have an issue with the selection process as it stands today. He added, "I've been on an interview with a young man that just started business, and I was quite impressed with the changes" at ODOT. He said that he feels that "[an ODOT official] is doing all that he can to make sure that equity is abound in Oklahoma ... whatever inequities have happened in the past, he's going to eliminate them."

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that he does not believe the bidding process is a barrier, although some firms are not selected based on discrimination. He reported that he has never prepared bids, so he does not have any personal experience.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated that she is not aware that the bidding process is a potential barrier for firms. She stated that she has not experienced the bidding process as a barrier for her firm and does not believe discrimination is a contributing factor.

Interviewee #33, the Caucasian male president of an engineering firm, stated that he is not aware that the bidding process is a barrier for firms. He stated that engineering firms actually do not bid, but he has not experienced any problems with the process used and does not believe discrimination is a factor.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that that she is not aware of the bidding process being a potential barrier for firms. She said that sometimes the technicalities on bids become a barrier and some are really restrictive, but once you learn how the system works, you can comply. She noted she does not believe discrimination contributes to the bid process being a barrier.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that he thinks that the bidding process is fair, but he added that he does not know who decides who gets what behind the scenes. He suggested that there should be a "periodic rotation" of the people making certain decisions, especially in areas where there is a no bid requirement." He said that he thinks that there is financial discrimination in the bidding process but not racial discrimination.

O. Factors public agencies or others use to make contract awards.

Some interviewees identified various factors public agencies or others use to make contract awards as a barrier to pursuing business opportunities. [Interviewees #: 1, 7, 13, 20, 28, 36, 37, 38, 40, 42, 44, 45, 46, 47, TA #2, TA #3, TA #6, TA #9, TA #10]. Interviewee #1, the Caucasian male chief financial officer of a Caucasian male-owned heavy highway and bridge construction firm, noted that his firm lost a contract in another state because they did not have the necessary prequalification.

Interviewee #7, the Native American owner of a federally-certified aerospace firm, stated ODOT should look at the real procedures occurring within the agency and what the agency would like to focus on in terms of the companies with which it would like to contract.

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, said that factors concerning firm size could pose barriers. He said that the selection of an engineering firm for a project is very subjective. He stated, "The committee that's making the selection, it could be anything from they didn't like your presentation to they didn't like the way you looked.... When you have that kind of subjectivity, you don't know if it's solely based on your qualifications." He said that "Once you're a licensed professional engineer, the State ... says you're experienced to do that work, or qualified to do that work, so for you not to get a project ... you just wonder why." He commented, "There haven't been a lot of African American engineering firms that have been DBEs, so you can't necessarily [fault] ODOT, but ... from my experience, I don't know how willing ODOT has been to work with African Americans."

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, said that factors public agencies use to make contract awards are barriers that his company has had experience with, but it is not discriminatory.

Interviewee #28, the Native American female president of a trucking and excavating firm, stated that she is aware that factors public agencies or others use to make contract awards may be barrier sfor firms. She stated that in the beginning her firm experienced problems in this area based on prime contractors wanting to use select subcontractors regardless of the bids received, but she does not believe discrimination contributes to this barrier.

Interviewee #36, a Caucasian female senior engineer of an engineering firm, stated that she is aware that there are some factors public agencies or others use to make contract awards that can be barriers for firms, especially for her company. She stated, "There is a very strong lobby in Oklahoma on public projects to use Oklahoma-based firms." She stated that many of the large engineering firms are not based in Oklahoma, especially on design-build projects, and the lobbying to use Oklahoma firms makes it difficult for large companies who are headquartered in other states to secure these projects.

Interviewee #37, the African American male owner of an engineering firm, stated that he is aware that factors public agencies or others use to make contract awards are barriers for firms and believes some of the factors to be based on discrimination.

Interviewee #38, the Native American female president of an engineering firm, stated that she is aware that factors public agencies or others use to make contract awards are potential barriers for

firms. She stated that the firm has had personal experience in this area. She reported that after the disparity study was conducted by the City of Tulsa, they restructured the contract selection point system to include awarding 20 points to any firm that had never had a project with the City of Tulsa. She commented that she believes discrimination contributes to factors public agencies or others use to make contract awards being potential barriers for firms.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, reported that he is aware that the factors public agencies or others use to make contract awards are potential barriers for firms and discrimination contributes to the barrier.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that that she is aware that the factors public agencies or others use to make contract awards are potential barriers for firms. She said that these provide ways for public agencies to get around awarding contracts to the lowest and best bidder. She also noted that the firm has had personal experience with this barrier and believes that the factors are affected by political matters more than discrimination.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that they are aware that factors public agencies or others use to make contract awards are potential barriers for firms. Interviewee #44 stated that the firm has experience with factors public agencies or others use to make contract awards being barriers and believes discrimination contributes to the barrier. Interviewee #44 stated that although a company may be the low bidder, they might not receive the contract because prime contractors have the authority to award the bid to whomever they choose.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that he is aware that factors public agencies or others use to make contract awards are potential barriers for firms. He stated that although he is not aware of the factors the public agencies use to award contracts, he does know that the lowest bidder does not always get the job. He stated that the firm has had personal experience with this barrier.

Interviewee #46, the African American male owner of a DBE-certified safety and environmental consulting firm, stated that he is aware that factors public agencies or others use to make contract awards are barriers for firms. He reported that he is not aware of what the factors are that public agencies use to make contract awards. He stated that when he had a meeting with ODOT to assess his proposal to determine what changes should be made, he did not get any answers to his inquiries. He stated that he believes discrimination may contribute to the this barrier.

Interviewee #47, the Caucasian female president of a WBE-certified trucking company, stated that she has had personal experience with factors public agencies or others use to make contract awards acting as a barrier, and she believes that discrimination contributed to the barrier because she is a woman business owner.

Interviewee TA #2, the executive director of a Hispanic trade association, said that this may be a barrier for the smallest businesses, but he does not think that it is based on discrimination.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, commented that

ODOT needs to reevaluate its processes annually. He added that if the same companies are getting "80 to 90 percent of the work," ODOT should question the validity of the system. He noted that including white females in the minority category should be examined because, often, companies owned by white females are "an extension of another company."

Interviewee TA #6, the president of a minority business development agency, reported that he was aware that the factors that ODOT or others use to make contract awards are barriers for firms and his clients. Interviewee TA #6 stated, "If there was total transparency in the process, then I would say that it was not a barrier, but I can't say it is a transparent process. Without transparency, it is a barrier."

Other interviewees identified no barriers posed by the factors that public agencies or others use to make contract awards. [Interviewees #: 2, 3, 4, 5, 6, 8, 11, 17, 18, 19, 21, 23, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 39, 41, 43, 48, TA #1, TA #4, TA #5]. Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, said that he does not believe that any discrimination exists against DBE and MBE/WBE firms working in the Oklahoma transportation industry or with ODOT.

Interviewee #30, the Caucasian male co-owner of a transportation firm, stated that he is not aware of the factors public agencies or others use to make contract awards as being barriers for firms. He stated that the process is "irritating" and "everything should be based on your service and price."

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, said that she is not aware of factors public agencies or others use to make contract awards being barriers. She stated, "I think the government is discriminating against quality because they are not thinking about the project itself." She continued that the government simply asks if the company is owned by a minority, if they have filled out the required forms, and if they fit the required criteria. She said that she does not believe that the process considers the company's work, and she thinks that that is "silly."

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, said that there are "no barriers" related to factors that public agencies use to make contract awards, but noted that "it is a serious process." He said that a contractor will need to show ODOT that they have insurance and a capability to perform the job; "it's not a one-page form that you fill out." He reported that this does not involve any discrimination.

P. Bid shopping.

Some interviewees identified bid shopping as a barrier to pursuing business opportunities or noted that bid shopping happens frequently in this industry. [Interviewees #: 2, 7, 9, 10, 14, 18, 20, 28, 29, 30, 31, 34, 36, 37, 39, 40, 42, 43, 44, 45, 47, TA #4, TA #5, TA #6, TA #7, TA #9]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, said that he is not sure, but sometimes something tells him that when he turns in his bid, the prime contractor shops it around and shows it to his competitors.

Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that his company has not experienced this problem, but he has heard about it. He said that there could be

discrimination involved. He added that if the contracting officers are not reviewed enough, they may have a "tendency to go to the same contractors all the time."

Interviewee #9, the African American owner of a non-certified trucking company, said that he has no personal experience with bid shopping, but he has heard of it happening. He added that he is not sure whether this is based on discrimination or just "trying to help your buddy out ... help your buddy get the job."

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, said that they have had some problems on ODOT projects where, "We've seen some interesting numbers.... We see someone come in just \$50 underneath us, \$100 underneath us," and they would be awarded the contract.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, reported that he was aware of bid shopping from time to time. He said that he experienced bid shopping while acting as a subcontractor. He said that this occurs when a prime tells a subcontractor that the job is looking good and that it looks like the prime will use that subcontractor, but after the job has been awarded, the prime uses another subcontractor. He said that there is no way to prove anything, but he thinks that the prime likely went to another subcontractor and asked that subcontractor to meet or beat the price.

Interviewee #28, the Native American female president of a trucking and excavating firm, stated that bid shopping is a "big time" barrier for a lot of people, including her firm. She said that she does not believe discrimination contributes to bid shopping being a barrier, but rather it is based on the "Good Old Boy System."

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that, although he has not had direct experience with bid shopping, he is certain it happens, and he believes that it is a potential barrier for firms based on discrimination.

Interviewee #30, the Caucasian male co-owner of a transportation firm, stated that he is aware that bid shopping is a barrier for firms. He stated that his firm has experienced bid shopping, but he reported that he does not believe it is based on discrimination.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated that she is aware that bid shopping is a potential barrier for firms. She reported that she has had personal experience with bid shopping but does not believe the problem is based on discrimination. Interviewee #31 stated that bid shopping happens because the project owner wants to use a particular company and cannot select that company because they are required to have three bids just to justify the award.

Interviewee #36, a Caucasian female senior engineer of an engineering firm stated that she is aware that bid shopping is a barrier for firms but that it is very rare. Interviewee #36 stated that she does not believe bid shopping to be based on discrimination but rather on pricing.

Interviewee #37, the African American male owner of an engineering firm, stated that he is aware that bid shopping is a barrier for firms. He stated that he has had personal experiences with bid

shopping but does not believe discrimination contributed to his experience. He said he believes it was based on pricing.

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that she is aware bid shopping is a potential barrier for firms. She stated that the firm frequently encounters inquiries from other companies shopping for their prices. She does not believe bid shopping is based on discrimination but rather on greed.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that he is aware of bid shopping being a potential barrier for firms. He reported that his firm has had personal experience with bid shopping when a prime contractor, who never intended to use anyone other than their selected choice, got three bids just to go through the formalities. He noted that he does believe discrimination contributes to bid shopping being a barrier for firms.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that she is aware of bid shopping being a potential barrier for firms. She said that the firm has had personal experience with bid shopping, but she is not sure if discrimination contributes to bid shopping being a barrier.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that they are aware bid shopping is a potential barrier for firms. Interviewee #43 stated that the firm frequently encounters bid shopping and believes bid shopping is based on discrimination.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that they are aware that bid shopping is a potential barrier for firms. He stated "for [Caucasian] contractors it is a way of life ... I've been there and seen them do it." Interviewee #44 stated that the firm has personally experienced bid shopping and believes discrimination contributes to bid shopping being a barrier.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that he is aware that bid shopping is a potential barrier for firms. Interviewee #45 stated that the firm has had personal experience with bid shopping being a barrier. He stated that bid shopping is part of the construction industry because people want to find out other companies' prices.

Interviewee #47, the Caucasian female president of a WBE-certified trucking company, stated that she is aware that bid shopping is a barrier for firms and that discrimination contributes to the barrier. She stated that she used to get bid sheets from ODOT but she no longer receives the notification.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, reported that he knows of a contractor that "was bid-shopped because they wanted to hire a minority firm."

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that he is aware of bid shopping being a potential barrier experienced by his clients, and he said that he believes the barrier is based on discrimination.

Interviewee TA #6, the president of a minority business development agency, stated that he was aware that bid shopping was a big barrier for firms and his clients. He stated that he believes the barrier is based on discrimination.

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that she is aware of bid shopping being a problem for her clients and that they have had personal experiences with this barrier.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that he is aware bid shopping is a barrier for firms. He stated that he fields many complaints wherein his clients report that bids are submitted but the prime contractors consistently pick the same firms they have worked with before over and over. Interviewee TA #9 stated that discrimination contributes to bid shopping being a barrier for minority-owned businesses.

Other interviewees indicated that they did not perceive bid shopping as a barrier to pursuing or engaging in business. [Interviewees #: 1, 3, 5, 6, 11, 13, 15, 16, 17, 19, 21, 23, 25, 26, 27, 32, 33, 35, 41, 48, TA #1, TA #2, TA #10]. Interviewee #6, the African American owner of a DBE-certified trucking company, said that although companies likely shop among many different companies, he does not think that they share a company's bid with other bidders.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that she was not aware that bid shopping is "a big problem" for firms.

Interviewee #33, the Caucasian male president of an engineering firm, stated that he is not aware that bid shopping is a barrier for firms, particularly engineering firms, because the method used for selecting engineering firms does not include the opportunity for this. He stated that his firm has not had any problems in this area and does not believe discrimination is a factor.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that he is not aware that bid shopping is a barrier for firms. He stated that he knows bid shopping happens every day, but it is just part of the process.

Q. Bid manipulation.

Some interviewees identified bid manipulation as a barrier to pursuing or obtaining business opportunities. [Interviewees #: 7, 9, 14, 28, 29, 30, 31, 32, 34, 36, 37, 39, 40, 43, 44, 45, 46, 47, 48, TA #5, TA #6, TA #7, TA #9]. Interviewee #7, the Native American owner of a federally-certified aerospace firm, reported that he has not seen bid manipulation, but he has heard of this happening, though he was not sure if there was anything to the accusations. He said that he does not think that discrimination was involved.

Interviewee #9, the African American owner of a non-certified trucking company, said that he is "sure that [bid manipulation is] out there." He said that he has heard from others that there is racial discrimination occurring at ODOT.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, reported that he was aware of bid manipulation from time to time. He said that sometimes a prime tells a subcontractor that the job is looking good and that it looks

like the prime will use that subcontractor, but after the project is awarded, the prime ends up using another subcontractor.

Interviewee #28, the Native American female president of a trucking and excavating firm, stated that she is aware bid manipulation is a barrier for firms. Interviewee #28 stated that she knows bid manipulation happens and her firm has had personal experience in this area. She reported that after a bid closing, her husband questioned the primes about the award and was told that another contractor came down on their bid and was awarded the contract. She stated she does not believe discrimination contributes to bid manipulation being a barrier for firms.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, reported that he believes that bid manipulation exists and is a barrier for firms. He said that he has had personal experience with bid manipulation and that he believes the barrier is based on greed, not discrimination.

Interviewee #30, the Caucasian male co-owner of a transportation firm, stated that he is aware that bid manipulation exists and is a barrier for firms. Interviewee #30 stated that he has had personal experience with bid manipulation in the past, but that he does not believe it is based on discrimination.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated she is aware of bid manipulation being a barrier for firms. She stated that she has had personal experience with bid manipulation. Interviewee #31 stated that owners or other companies have wanted to use them but someone else was the low bidder. She stated that the owners knew that the low bidder did not do good work and did not want to use the low bidder, so the owner contacted her firm and told her the low bidder's number and asked if her firm could match it. She stated that bid manipulation is not based on discrimination but rather on the owner's desire to ensure that they contract with someone who does good work.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that she is aware that bid manipulation is a problem for firms. However, she stated that she has not had personal experiences with bid manipulation, and she does not believe that the potential barrier of bid manipulation is based on discrimination.

Interviewee #36, a Caucasian female senior engineer of an engineering firm stated that she is aware that bid manipulation happens and is a barrier for firms but does not believe it to be widespread. She stated that bid manipulation is encountered more often on construction projects and is based on personal relationships more than discrimination.

Interviewee #37, the African American male owner of an engineering firm stated, that he is aware that bid manipulation is a problem for firms and reported hearing many stories of bid manipulation happening. He stated that he has not had personal experiences with bid manipulation but has had bids cancelled because he was the low bidder and has experienced having bids changed when it appeared he was in the process of being selected for the project. He stated that he does believe that the experiences he had were based on discrimination.

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that she is aware bid manipulation is a potential barrier for firms. She stated that she does not believe bid manipulation is based on discrimination.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, reported that he is aware of bid manipulation being a potential barrier for firms. He said that the firm has had personal experience with bid manipulation and that it happens frequently. He stated that he does believe discrimination contributes to bid manipulation being a barrier for firms.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that they are aware that bid manipulation is a barrier for firms. Interviewee #43 stated that they are victims of bid manipulation all the time. Interviewee #43 stated, "There really isn't anything you can do about it." They stated that they think bid manipulation may be based on discrimination and greed by the prime contractor.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that they are aware that bid manipulation is barrier for firms. Interviewee #44 stated that the firm has had personal experience with bid manipulation and believes discrimination is a contributing factor.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that he is aware that bid manipulation is a potential barrier for firms. Interviewee #45 stated that the firm has had personal experience with bid manipulation. He stated that he believes bid manipulation happens because in most situations the primes already know who they are going to use and the bid process is just a formality. He stated that he believes discrimination contributes to this being a barrier for firms.

Interviewee #46, the African American male owner of a DBE-certified safety and environmental consulting firm, stated that he is aware that bid manipulation is a problem for firms. He stated that he has not had any personal experience with bid manipulation but does believe discrimination contributes to bid manipulation being a barrier. Interviewee #46 stated that firms find a way for their friends to get projects.

Interviewee #47, the Caucasian female president of a WBE-certified trucking company, stated that she is aware that bid manipulation is a barrier for firms. She stated that she believes gender discrimination contributes to bid manipulation being a barrier for firms.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that he is aware that bid manipulation is a barrier for firms and that it happens all the time. He stated that he has had experience with bid manipulation and he believes discrimination contributes to the barrier.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that he is aware of bid manipulation being a barrier for firms and believes bid manipulation exists, but he said that he does not have any evidence to support his belief, though he considers it to be based on ethnic and gender discrimination.

Interviewee TA #6, the president of a minority business development agency, stated that he was aware that bid manipulation was a barrier for firms. He stated that his clients have personally experienced the barrier and believe it to be based on discrimination.

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that she "had heard about" this barrier, but she "did not know any details."

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that he is aware that bid manipulation is a barrier for firms and believes discrimination contributes to the existence of this barrier.

Other interviewees indicated that they did not perceive bid manipulation as a barrier to pursuing or engaging in business. [Interviewees #: 1, 3, 4, 5, 6, 11, 15, 16, 17, 18, 19, 20, 21, 23, 25, 26, 27, 33, 35, 41, 42, TA #1, TA #2, TA #10]. Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, reported that in the private sector, he has worked on a project or projects where the prime contractor or owner awarded the contract to another firm that they knew even though the other firm's bid was higher. He stated that bid manipulation does happen in the private sector and described companies opening all of the bids and reviewing them; in contrast, he said, in the public sector all bids must be opened in public. He stated that he does not view bid manipulation as a barrier because that is just how companies operate. He reported that he used to believe that this was based on discrimination, but the more he worked in the area, the more he has come to believe that this is just the way that it is.

Interviewee #33, the Caucasian male president of an engineering firm, stated that he is not aware that bid manipulation is a barrier for firms, particularly engineering firms, because the method used for selecting engineering firms does not include the opportunity for this. He stated that his firm has not had any problems in this area and does not believe discrimination is a factor.

R. Treatment by prime contractor or customer during performance of work.

Some interviewees identified treatment by prime contractors or customers during the work performance as a barrier to pursuing or obtaining business opportunities. [Interviewees #: 2, 7, 14, 16, 20, 27, 28, 29, 31, 34, 36, 37, 38, 39, 42, 43, 44, 45, 47, TA #3, TA #4, TA #5, TA #6, TA #7, TA #9, TA #10]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, said that he would "not feel comfortable" working with an ODOT prime contractor now with all of the complaints that he has filed against them.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, reported that it is the prime contractor culture to not value any subcontractor regardless of race and this creates barriers, but he indicated that he does not believe the barrier is based on discrimination. He said that generally primes "view subcontractors as cogs in the wheel and they wear that cog out, and it goes broke, well then they get another cog. And if they've messed up on their bid and [they have to] grind [\$100,000] out of the cost of the job because they blew their bid, they will find some sub to use and abuse."

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, said that he feels that there is some discrimination. He said that indirectly, "They will just let me know that I'm not one of them." He commented that this discrimination

depends "upon the education of the person ... some of them can be really derogatory." He said that primes and customers eventually "appreciate the services, and it takes a long time for them to really accept us, and once they accept it, there's no problem."

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, said that treatment by a prime or customer during performance is a barrier, but it is not discriminatory. Interviewee #20 said that he had a chainsaw thrown at him in the presence of ODOT, and nothing was done about it.

Interviewee #27, the Caucasian female owner of a DBE-certified erosion control firm, reported that she has some experience with treatment by a prime or customer being a barrier, but it was not due to discrimination, but instead incompetence on the part of the prime.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, reported that he has experienced unfavorable treatment by the prime or customer during performance of the work, and he sees it is a potential barrier for firms based on ego, not discrimination.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated she is aware that treatment by the primes or customers during performance of the work is a barrier for firms. She stated that her firm has not had any personal experience with adverse treatment from primes or customers and does not believe that treatment by the primes or customers is based on discrimination.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm, stated that he is aware that treatment by prime or customers during performance of the work is a problem for firms but "it depends on the prime." He stated that he has had personal experience with one prime that treats everyone badly. He stated that the matter has been brought to the attention of ODOT but "nothing has been done." He stated that he does not believe the problem to be based on discrimination.

Interviewee #36, a Caucasian female senior engineer of an engineering firm, stated that she is aware that treatment by primes or customers during performance of the work is a barrier for firms. She stated that she has not personally experience treatment by primes or customers during performance of the work as a barrier. She believes that primes or customers do that to everybody and cannot attribute it to discrimination.

Interviewee #37, the African American male owner of an engineering firm, stated that he is aware that treatment by primes or customers during performance of the work is a problem for firms. He stated that he has not had any major personal experience in this area, but knows of many people who have had a problem with the treatment by primes or customers during performance of the work, mainly in the construction field. He stated that he believes discrimination contributes to this barrier. He reported that he is aware of an African American contractor who performed work on a county project to install an air conditioning system. He stated that the contractor was almost finished with the project and remembered he needed to do something at the job site. He stated that when the contractor returned to the site he caught the county electric staff stuffing rags in the duct work that his firm had installed which would have made the system fail and require additional repairs. Interviewee #37 stated that he felt this treatment was clearly discriminatory. He reported

being aware of another case in which a contractor had a project sabotaged when someone opened a closed gas valve, which again he believes was discriminatory.

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that that she is aware treatment by prime or customers during performance of the work is a potential barrier for firms, but has not experienced this barrier with ODOT. Interviewee #39 stated that she does not believe discrimination contributes to the barrier.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that they are aware treatment by primes or customers during performance of the work is a potential barrier for firms. Interviewee #43 stated that the firm has experienced this barrier and he does believe that the barrier is related to discrimination.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that he is aware treatment by primes or customers during the performance of the work is a potential barrier for firms. Interviewee #45 stated that sometimes the primes will overload the trucks of small businesses. He stated that the firm has had to leave some jobs because the small and minority firms were treated differently than majority firms.

Interviewee #47, the Caucasian female president of a WBE-certified trucking company, stated that she is aware that treatment by primes or customers during performance of the work is a problem for firms. She stated that she has had personal experience with this and believes that gender discrimination contributed to the barrier.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, stated that treatment by primes or customers during performance of work could be a barrier. He added it may be discriminatory if a prime hires a subcontractor for a day to meet a minority requirement and then fires him after the first day for being unable to do the work only to bring in an "old friend to finish the job." He stated that this is "not an uncommon practice." He said that the last time that he heard of this occurring was several years ago, and race was involved.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, said that in one instance, one of the organization's members caught "a lot of heat as far as the quality of the work."

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that his instinct says that treatment by primes or customers during performance of work is a potential barrier, but he does not believe that it is based on discrimination. He stated that he has personal knowledge of firms frequently being coerced by primes into performing tasks that are outside the scope of the contract.

Interviewee TA #6, the president of a minority business development agency, stated that he was aware that the treatment by primes or customers during the performance of the work can be a barrier for firms. He stated that some firms are highly-scrutinized, more so than others, to make it difficult for that firm and in hopes of getting the firm off the job and replacing it with a contractor that the prime or customer wanted to have perform the job originally.

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that she is aware of this being a problem for her clients. She reported that three or four of them have had personal experiences with this barrier, and that she believes that gender, racial, and ethnic discrimination contribute to this barrier.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that he is aware that the treatment by primes or customers during the performance of the work is a barrier for firms. He stated that discrimination contributes to the barrier.

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that her clients have had personal experience with treatment by the primes or customers during the performance of the work acting as a barrier and she believes discrimination contributes to the barrier.

Other interviewees reported that they had no experience with and were not aware of barriers in connection with treatment by a prime contractor or customer during the work performance. [Interviewees #: 1, 3, 4, 5, 6, 8, 9, 11, 12, 17, 18, 19, 21, 23, 25, 30, 32, 33, 34, 35, 40, 41, 46, 48, TA #1, TA #2]. Interviewee #3, the Caucasian male president of a civil engineering firm, stated that treatment by the prime or the customer "is not a barrier at all" to small businesses. "In some situations ... [DBEs] were treated better than they should have been treated. They got paid when they should not have gotten paid and that type of thing."

Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that he had never been treated badly by a prime contractor or customer. He stated that he has heard of some contractors that are very strict, but he does not believe that it is discriminatory; rather, the contractor just wants the work performed to their specifications. He stated that if a firm performs good work then they will be sought-after.

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that "as long as you perform your work, you won't have any problem" with the prime contractor or the customer.

Interviewee #30, the Caucasian male co-owner of a transportation firm, stated that he is not aware of treatment by the prime or customers during performance of the work being a barrier for firms. He stated that his company has not had any personal experience with mistreatment by the prime or customer during performance of the work acting as a barrier. Interviewee #30 also stated that he does not believe that this potential barrier is based on discrimination.

Interviewee #33, the Caucasian male president of an engineering firm, stated that he is not aware of treatment by primes or customers during the performance of the work being a barrier for firms. He stated that his firm has not had any problems in this area and does not believe discrimination is a factor.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that he is not aware of treatment by primes or customers during the performance of the work being a potential barrier for firms. He said that he has not any personal experience with treatment by primes or customer being a barrier.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that he is not aware that treatment by primes or customers during performance of the work is a problem for firms. He stated that he knows that on every project he will have to do more work than is in the original agreement. He stated that he accepts that a subcontractor being asked to do extra work is a part of the industry and that he has never had any problems on any projects.

S. Approval of the work by the prime contractor or customer.

Some interviewees reported that the approval of work by a prime contractor or customer is a barrier to pursuing or engaging in work. [Interviewees #: 5, 12, 29, 34, 36, 37, 39, 43, 44, 46, TA #3, TA #5, TA #7, TA #9, TA #10]. Interviewee #5, the Caucasian male co-owner of a geotechnical engineering firm, reported that approval of the work by the customer or prime contractor can be a barrier, but it is not based on discrimination. He stated that he thinks that this is based on personality conflicts.

Interviewee #12, the owner of a female-owned non-certified civil engineering and land surveying firm, said that approval of work by primes and customers has been a barrier because "the levels of review sometimes change, [as do] personnel within the reviewing agency, [and] one level of review may require certain things on the plans, and then they go to another level of review, and those requirements are different."

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that he believes that approval of work by the prime or customer is a potential barrier for firms that depends on the contractor, but it is a general problem for small companies and is not based on discrimination.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm, stated that he is aware that approval of work by primes or customers is a barrier for firms but he has not had any personal experiences with this barrier. He stated that he does not believe the problem to be based on discrimination.

Interviewee #36, a Caucasian female senior engineer of an engineering firm, stated that she is aware that approval of the work by the prime or customer could be a barrier for firms and that it is based on the individual. She stated that she does not believe discrimination contributes to this barrier.

Interviewee #37, the African American male owner of an engineering firm stated, that he is aware that approval of work by primes or customers is a barrier for firms. He stated that he does believe the problem to be based on discrimination. Interviewee #37 stated that he had a minority contractor who worked on a project he designed and the owner refused to give him his final payment until he did some additional work that was arbitrarily added to his scope of work. He stated that he believes the failure to approve the work and the delay in final payment was discriminatory. Interviewee #37 stated that he was aware of another incident with a subcontractor where the prime added additional work and refused to pay the subcontractor, which he believes was discriminatory.

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that she is not aware of the approval of the work by the prime or customer

being a barrier for firms in the public sector, but she is aware of it being a barrier for firms in the private sector. She stated that she does not believe discrimination contributed to the barrier.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that they are aware the approval of the work by the prime or customer is a potential barrier for firms. Interviewee #43 stated that the firm has had experience with this on ODOT projects and believes discrimination contributes to the barrier.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that the firm has had experience with the approval of the work by the customer being a barrier on ODOT projects and believes discrimination is a contributing factor.

Interviewee #46, the African American male owner of a DBE-certified safety and environmental consulting firm, stated that he is aware that approval of work by primes or customers is a barrier for firms and believes the barrier is related to discrimination.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, reported that this has been a barrier but that it is getting better.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that he is aware and believes that approval of work by prime or customer is a potential barrier, but it is a general problem and is not based on discrimination. Interviewee TA #5 stated that he could not report any personal experience with this barrier.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that he is aware approval of the work by primes or customers is a barrier for firms and discrimination is a contributing factor.

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that her clients have had personal experience with approval of the work by primes or customers as a barrier and she believes discrimination is a contributes to the barrier.

Other interviewees indicated that they did not perceive approval of work by a prime contractor or customer to be a barrier to pursuing or engaging in work. [Interviewees #: 1, 2, 3, 4, 6, 7, 9, 10, 11, 13, 17, 18, 19, 20, 21, 23, 25, 27, 28, 30, 31, 32, 33, 34, 35, 40, 41, 42, 45, 47, 48, TA #1, TA #2, TA #6].

T. Payment by the prime contractor or customer.

Some interviewees identified issues related to payment by a prime contractor or customer as a barrier to pursuing business opportunities. [Interviewees #: 2, 3, 4, 5, 7, 9, 10, 11, 12, 13, 15, 16, 18, 20, 21, 27, 29, 30, 31, 34, 35, 36, 37, 38, 39, 40, 42, 43, 44, 45, TA #2, TA #3, TA #5, TA #6, TA #7, TA #9, TA #10]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, said that timely payment "is a problem." Interviewee #2 said, "I made a resolution where I am going to evaluate any payment process before I sign anything" or do any work. He said that if the payment process does not fit into his payment schedule, he will not take the work.

Interviewee #3, the Caucasian male president of a civil engineering firm, said that in his industry, "if you are small and you are just working for ODOT," then timely payment could be an issue.

Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that if a firm worked for only one prime contractor, timely payment could be a barrier because some prime contractors take a long time to pay. He reported that he has one prime contractor who has owed him money for over one year. He said that he does not believe that this is based on discrimination.

Interviewee #5, the Caucasian male co-owner of a geotechnical engineering firm, reported that this can be a barrier, but he does not think that discrimination is involved. He said that he thinks that everyone is treated the same way.

Interviewee #7, the Native American owner of a federally-certified aerospace firm, reported that ODOT cannot pay until after the work is complete, so a company cannot submit an invoice until 30 to 60 days after work has begun. He noted that this can be a problem, especially for smaller companies that cannot afford to front this kind of money. Interviewee #7 recommended that ODOT consider a "rapid pay system" in which a business classified as a disadvantaged business or a minority small business would be put "on an accelerated payment schedule, [which] helps smaller business get over those first contract period lag times." He said that this could be based on discrimination against small businesses, but not racial or gender discrimination.

Interviewee #9, the African American owner of a non-certified trucking company, reported that he does not have a problem with timely payment. He stated, "I had more problems getting paid in the private sector in the public." He said that it may be a barrier in the private sector, but he does not think that discrimination was involved. He said that he just thinks that "people don't like to pay on time sometimes," and "they want to wait until they get paid."

Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, reported that he once had a problem with a Caucasian man who would not pay him. He added that the man was not a good guy, and the problem was the man's attitude.

Interviewee #12, the owner of a female-owned non-certified civil engineering and land surveying firm, said that he does not know what one should consider timely, but "the process of getting claims approved, and to the funding people, and their review, and actually getting a check in the public sector seems to me to be ... takes a lot longer." He noted, "We have an established group of private developers that when we send them a bill, they send us a check.... That's not true in the government."

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, commented that slow payment is a barrier in the private sector. He added, "I was a resident engineer for ODOT. I know a lot of times ... as subs, the DBEs would get their work complete, and I know for a fact that I had paid the prime contractor, and the DBE still hadn't obtained their funding for the amount of work that they had completed. Now ... a lot of times that was just the prime/sub relationship in general, but I think it was extremely difficult for some of the DBEs." He stated that "one of the things I've always heard from some of the DBE contractors is they wish there was a way that ODOT would" pay them directly instead of getting paid through the prime, "because they didn't have any recourse once they came to the resident engineer," who

could only tell them that they paid the prime, and "the prime is telling him something totally different, and the subcontractor ... had no recourse a lot of times."

Interviewee #15, the Caucasian male co-owner and manager of an engineering firm, said that he has experienced issues related to payment, adding, "It's tight." He said that 95 percent of people are just slow and do pay eventually.

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, said that issues related to payment are a barrier. He said, "Right now, it's very difficult" due to the economy, adding, "Even with really good intentions, they are not able to pay, but there are some people [for whom it is] just hard for them to write the check." He commented that this is generally not a problem.

Interviewee #18, the Caucasian male treasurer of a Caucasian male-owned heavy paving and grading construction firm, was aware of issues relating to payment in the past, but said that they could also be related to a performance or quality issue with the work.

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, said that relative to other public sector work, it is harder to get paid by ODOT. He said that there are always arguments about change of scope and that it can take almost a year before an engineer resolves a change of scope issue.

Interviewee #27, the Caucasian female owner of a DBE-certified erosion control firm, reported experiencing some delays in payment from one prime, but this issue was addressed and not motivated by discrimination in her opinion.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that timely payment may not be a barrier for primes, but he said that it is a huge barrier for subcontractors. He reported that he has experienced problems getting timely payment from a contractor, which he believes was based on discrimination.

Interviewee #30, the Caucasian male co-owner of a transportation firm, stated that he is aware that timely payment is a barrier for firms. He stated that he has experienced timely payment as a barrier. He stated that he does not believe that discrimination contributes to this being a barrier.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated that she is aware that timely payment is a barrier for firms. She stated that her firm has experienced this, but she does not believe the barrier to be based on discrimination.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm, stated that he is aware that timely payment by the customer or primes is a barrier for firms. He stated that he has had personal experience with the problem but commented that it was not based on discrimination.

Interviewee #35, the Native American female president of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated that she is aware timely payment by

the customer or prime is a barrier for firms and the firm has had personal experience in this area, but she does not believe this barrier is related to discrimination.

Interviewee #36, a Caucasian female senior engineer of an engineering firm stated that she is aware that timely payment by the customer or prime is a barrier for firms. She stated that her firm has had personal experience with timely payments by the customer or prime but does not believe discrimination contributed to the barrier.

Interviewee #37, the African American male owner of an engineering firm, stated that he is aware that timely payment by the customer or primes is a barrier for firms. He stated that he has had personal experience with timely payment being a problem on a project. He stated that he was working as a subcontractor with an 8(a) prime contractor and the contract was canceled "at will." Interviewee #37 stated that he requested payment for the work that had been completed, and after a seven-month delay without payment, he was forced to write a letter threatening to contact the SBA; then he finally received payment. He reported that he believes the failure to make timely payment was based on discrimination.

Interviewee #38, the Native American female president of an engineering firm, stated that she is aware that timely payment by the customer or prime is a potential barrier for firms. She said that the firm has had personal experience in this area and does believe discrimination contributes to timely payment by the customer or prime being a potential barrier for firms. She stated that she believes oftentimes customers or primes think they can treat minority firms differently than majority firms and that this is based on discrimination.

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that that she is aware timely payment by the customer or prime is a barrier for firms. Interviewee #39 stated that the firm has had personal experience in this area, but does believe discrimination contributes to this barrier.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that he is aware that timely payment by a customer or prime is a potential barrier for firms. He noted that the firm has had personal experience in this area because it happens every month. He said that the "big guy likes to use the little guy's money until the little guy complains enough." He reported that after not getting paid on a project, he finally contacted the prime and complained. He stated that the prime said that they had not gotten paid, so he called ODOT, then called the prime back and demanded payment because ODOT informed him that the prime had been paid three months earlier. He stated that he believes the untimely payment by customers or primes is based on greed more than discrimination of any kind.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that that she is aware of timely payment by the customer or prime being a potential barrier for firms. She reported that the firm has had personal experience in this area, but she does not believe discrimination contributes to this barrier. She added that sometimes big prime contractors do not pay promptly and are reported to the City of Tulsa; however, there is a big bureaucratic process and no quick and sufficient response to remedy the problem.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that that they are aware

that timely payment by the customer or prime is a potential barrier for firms. Interviewee #43 stated that the firm has had personal experience in this area and believes discrimination contributes to this barrier for firms.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that he is aware timely payment by the customer or prime is a potential barrier for firms. Interviewee #45 stated that the firm has had personal experience with untimely payments and particularly slow payment in the public sector. He stated that in the private sector, timely payment is not a factor. He stated that the discrimination is not racial but against small firms because the larger companies do not see a need for small businesses.

Interviewee TA #2, the executive director of a Hispanic trade association, reported that he has heard that timely payment has been a problem, especially with small businesses that have undocumented workers who receive bad checks. He said that he definitely believes that this is based on discrimination.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that this could be a barrier, but in most instances, contractors treat their subcontractors fairly.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that he has experience with timely payment by the customer or prime being a barrier, but he cannot attribute it to discrimination because "it's hard to quantify."

Interviewee TA #6, the president of a minority business development agency, stated that he was aware that timely payment by the customer and prime can be a barrier for firms. He stated that his clients have experienced this barrier personally but it is not based on discrimination.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that he is aware that timely payment by the customer or prime is a barrier for firms. He stated that he believes discrimination contributes to the barrier.

Other interviewees identified no barriers in connection with payment by a prime contractor or customer. [Interviewees #: 1, 6, 8, 17, 19, 23, 25, 28, 32, 33, 41, 46, 47, TA #1, TA #4]. Interviewee #6, the African American owner of a DBE-certified trucking company, stated that when a subcontractor first starts in the business, "if you're working for several different primes, you will quickly learn the primes that you want to work for and the ones that you don't." He stated that the subcontractor can negotiate a pay agreement so they will know approximately when they will be paid. He added that he does not think that it is a barrier once you learn how to negotiate payment properly, and he does not think that discrimination is involved.

Interviewee #33, the Caucasian male president of an engineering firm, stated that he is not aware of timely payment by the customer or the prime being a barrier for firms. He stated that his firm has not had any problems in this area and does not believe discrimination is a factor.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, reported that he "never [had] heard of a problem" from his members related to timely payment by the customer or prime contractor.

U. Other.

Some interviewees identified additional barriers to pursuing or engaging in business. [Interviewees #: 4, 8, 9, 20, 36, 37, 39, 42, 43, TA #9]. Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that the only barrier at this time to pursuing or engaging in business opportunities is that there is not enough work.

Interviewee #8, the African American president and owner of a civil and structural engineering firm, said "The only barriers ... that potentially could affect equal work are mindsets." He said that policy seems to be going in the right direction, but if "the mindset of the public" or the people in charge of dividing up the work is that "you are lesser than they are," then this trend of not having equal work will continue.

Interviewee #9, the African American owner of a non-certified trucking company, said that truckers have to go through a lot of barriers with so many requirements and with everything being so expensive. He noted that this makes it hard for businesses to survive. He also indicated that if someone is not clean-cut or does not fit the mold of what a particular kind of person "should" look like, this may also serve as a barrier.

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, said there are legal barriers included in the contracts awarded to prime contractors. He said that there are penalties in the contract with the prime contractors, and when a company is sued by ODOT, a subcontractor may be sued by the prime through no fault of its own and incur large expenses.

Interviewee #36, a Caucasian female senior engineer of an engineering firm, stated that geographic discrimination is a barrier her firm encounters.

Interviewee #37, the African American male owner of an engineering firm, stated, "There is an unofficial 'Good Old Boy System' that operates in this state and you can write all the regulations you want, but there are people that control money and how it's spent and who gets it and they basically don't give up that control. You can fight them and find ways to get a little piece here and a little piece there but the overall system is still controlled by those same people."

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that firms that do not have Spanish-speaking superintendents or foremen do not want to hire Hispanic labors because of the communication gaps. Interviewee #39 stated that there are also some superintendents or foremen that do not want to have female truck drivers on their jobs.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that ODOT wants firms to become certified and participate in the DBE Program, but ODOT makes it difficult for firms to become certified.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that discrimination is still a barrier.

Interviewee TA #9, the African American male coordinator for a state business and economic development agency stated that representatives of business development organizations and agencies

serving minorities report that the goals in the DBE Program are being met by majority firms and contractors. He stated that statistics show that less than 1 percent of the DBE contract dollars were awarded to racial minorities and 0 percent was awarded to African American firms in the 2009 fiscal year.

Some interviewees reported that they were not aware of any other barriers in the marketplace. [Interviewees #: 1, 2, 3, 5, 6, 17, 18, 19, 21, 23, 25, 26, 28, 34, 35, 44, 45, TA #1, TA #2, TA #3, TA #9, TA #10]. Interviewee #3, the Caucasian male president of a civil engineering firm, said that every firm has the same opportunity with ODOT, "whether you are a DBE, a small business, or a large business ... they can all bid [on the same job]," and the "low bid wins."

VII. Additional Information Regarding Whether Any Race, Ethnicity, or Gender Discrimination Affects Business Opportunities.

The interviewees were asked whether they were aware of or had experienced discrimination in the local marketplace based race, ethnicity, or gender.

Some interviewees reported that they were generally not aware of discrimination within the Oklahoma transportation industry or ODOT. [Interviewees #: 3, 4, 15, 23, 24, 25, 26]. Interviewee #3, the Caucasian male president of a civil engineering firm, said there is no discrimination in the Oklahoma transportation industry or working with ODOT. He said, "I really think that ODOT has been very good at giving opportunities to everyone. That's how I feel too, and that is why I like working with ODOT."

Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that there is no discrimination based on race, ethnicity, or gender in the Oklahoma transportation industry. He noted that he was just contacted by a public agency to be included in a publication; he reported that this made him feel good and like his firm was making a difference for the City. He noted also that the people who work for the State are always trying to help.

Interviewee #15, the Caucasian male co-owner and manager of an engineering firm, said that in the engineering world, he has not been generally aware of discrimination.

Interviewee #24, the Caucasian male owner of a utilities construction firm, reports he has no other knowledge or experience of discrimination or unfair practices directly or indirectly related to ODOT.

Interviewee #26, a supervising manager of a Caucasian-owned construction firm, reported no experience or knowledge of discrimination against Oklahoma firms by ODOT or any other government agency.

A. Price discrimination in obtaining financing, bonding, materials and supplies or other products or services.

Some interviewees reported being aware of or having experienced price discrimination in obtaining financing, bonding, materials and supplies or other products or services. [Interviewees #: 2, 28, 29, 37, 38, 40, 44, 45, TA #5, TA #6, TA #7, TA #9, TA #10]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, said that bonding

requirements and access to lines of credit "exclude DBEs right off the bat" because most DBEs "cannot get a half a million dollar bond." He said that he believes this is discriminatory.

Interviewee #28, the Native American female president of a trucking and excavating firm, stated that she is aware of price discrimination in obtaining financing, bonding, materials and supplies or other products or services being a problem for MBE/WBE/DBE firms. She stated that the firm has not had any personal experiences in this area and she cannot directly or indirectly relate it to opportunities within ODOT.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that price discrimination in obtaining financing, bonding, materials and supplies or other products or services is a problem for MBE/WBE/DBE firms. He stated that he has experienced problems in this area, but because he just recently became certified as a DBE and has not actually worked with ODOT, he cannot relate it to opportunities within ODOT.

Interviewee #37, the African American male owner of an engineering firm, stated that he is aware of price discrimination in obtaining financing, bonding, materials and supplies or other products or services being a problem for MBE/WBE/DBE firms. Interviewee #37 stated that he has not had any personal experience with price discrimination in obtaining financing, bonding, materials and supplies or other products or services and cannot relate it to opportunities with ODOT.

Interviewee #38, the Native American female president of an engineering firm, stated that she is aware price discrimination in obtaining financing, bonding, materials and supplies or other products or services is a problem for MBE/WBE/DBE firms. Interviewee #38 stated that the firm has not had any personal experience in this area and cannot say if the problem directly or indirectly relates to opportunities with ODOT.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, reported that he is aware of price discrimination being a problem for MBE/WBE/DBE firms and stated that it depends upon the part of the State in which you work because some areas of the State are more prejudiced than others. He said that the firm has not had any personal experience in this area and cannot say if the problem directly or indirectly relates to opportunities with ODOT.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that they are aware that price discrimination in obtaining financing, bonding, materials and other products or services is a problem for MBE/WBE/DBE firms. Interviewee #44 stated that the firm has had personal experience in this area and can say that the problem directly relates to opportunities with ODOT.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that he is aware price discrimination in obtaining financing, bonding, materials and supplies or other products or services is a problem for MBE/WBE/DBE firms. Interviewee #45 stated that the firm has had personal experience in this area when the firm received different pricing for materials and parts, but he cannot say if the problem directly or indirectly relates to opportunities with ODOT.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that he is aware that price discrimination in obtaining financing, bonding,

materials and supplies, or other products or services is a problem because standards and prices are not as transparent and are not disclosed. He stated, "The cost of doing business is sometime too high;" however, he said that he does not believe that this factor is directly the fault of ODOT or can be related to opportunities with ODOT.

Interviewee TA #6, the president of a minority business development agency, stated that he is aware that price discrimination in obtaining bonding, materials and supplies or other products or services is a problem for MBE/WBE/DBE firms and one that his clients have experienced. He said that he cannot directly relate the problem to opportunities with ODOT. He added that being able to buy in bulk and being able to buy products at a discount indirectly relates to bid amounts for ODOT opportunities.

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that her clients have had personal experience with this area of discrimination and that it relates to opportunities with ODOT.

Other interviewees reported having no awareness of or experience with price discrimination in obtaining financing, bonding, materials and supplies or other products or services. [Interviewees #: 1, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 25, 26, 27, 30, 31, 32, 33, 34, 35, 36, 39, 41, 42, 43, 46, 47, 48, TA #1, TA #2, TA #3, TA #4]. Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, reported that she is not aware that price discrimination in obtaining financing, bonding, materials, and supplies or other products or services is a problem for MBE/WBE/DBE firms, but she suggested that it could be, based on a company's history.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that he is aware of price discrimination in obtaining financing, bonding, materials and supplies or other products or services being a problem for firms based on their size, but not based on their minority or DBE status.

B. Denial of the opportunity to bid.

Some interviewees reported that they have been denied the opportunity to bid or that they are aware of others having been denied the opportunity to bid. [Interviewees #: 14, 19, 38, 41, 44, 46, 47, TA #2, TA #4, TA #7, TA #9, TA #10]. Interviewee #19, the Caucasian male chief engineer of a Latino male-owned bridge design engineering firm, said that there have been firms that have been denied the opportunity to bid, but it was because they had done something wrong.

Interviewee #38, the Native American female president of an engineering firm, stated that she is aware the denial of the opportunity to bid is a problem for MBE/WBE/DBE firms. She reported attending a City of Tulsa Bridge Participants Meeting where many of the African American contractors complained about not having the opportunity to submit bids for ODOT projects and the challenges they faced. She stated that the firm has not had any personal experience in this area but has knowledge of the problem directly relating to opportunities with ODOT.

Interviewee #41, the Hispanic male owner of a DBE-certified trucking firm, reported that he is aware of denial of the opportunity to bid being a problem for MBE/WBE/DBE firms. He stated that his firm has had personal experience with prime contractors not providing the necessary

information needed to prepare a bid. He stated that he cannot directly or indirectly relate the problem to opportunities with ODOT.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that they are aware that the denial of the opportunity to bid is a problem for MBE/WBE/DBE firms and that the problem is related to opportunities with ODOT.

Interviewee #46, the African American male owner of a DBE-certified safety and environmental consulting firm, stated that he is aware of the denial of the opportunity to bid being a problem for MBE/WBE/DBE firms. Interviewee #46 stated that he has had personal experience in this area when he failed to receive notifications and solicitations from ODOT.

Interviewee #47, the Caucasian female president of a WBE-certified trucking company, stated that she is aware of the denial of the opportunity to bid being a problem for MBE/WBE/DBE firms because firms can only bid on jobs that they know about. She stated that she has had personal experience being denied the opportunity to submit bids because she can only bid on those projects that she is aware of. She stated that she can directly relate the barrier of being denied the opportunity bid to opportunities with ODOT.

Interviewee TA #2, the executive director of a Hispanic trade association, said that he has heard of this occurring only when "they don't have all their ducks in a row." He said that he believes that this occurred with ODOT. He stated that he does not think that this was based on discrimination, and it was "the company's fault for not having things in place ..., but I think there should be more educational opportunities ... to help people put things like that in place to give them more opportunities."

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, reported that he has heard "of a couple of entities that have had some problems with the ... push to utilize minority firms to the point that ... they've done the complete opposite [and] won't even [consider] minority firms because they feel like they shouldn't be forced to hire anybody, and while there's no mandate [there is pressure to hire minorities]." He stated that the pressure to hire minorities has "resulted in pushback" from both primes and subcontractors.

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that her clients have had personal experience with this area of discrimination and that it relates to opportunities with ODOT.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that he is aware that the denial of the opportunity to bid is a problem for MBE/WBE/DBE firms in the local marketplace. He stated that the DBE firms report that they are not receiving notifications or solicitations and they consider that being denied the opportunity to bid.

Other interviewees reported no awareness of or experience with having been denied the opportunity to submit a bid. [Interviewees #: 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 16, 17, 18, 20, 21, 22, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 39, 40, 42, 43, 45, 48, TA #1, TA #3, TA #5, TA #6]. Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that he was not aware of any minority or women-owned firms being denied the opportunity

to submit a bid. He stated that prime contractors and customers look for minorities and women with whom they can work.

Interviewee #9, the African American owner of a non-certified trucking company, said that companies will take bids, but he cannot help but wonder if there might be another reason that he does not actually get the work.

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, said that he was not aware of this being a barrier and added, "Actually, it's quite the opposite.... They usually call us and say, 'Why aren't you DBE? We need a DBE, and we want to work with you."

Interviewee #12, the owner of a female-owned non-certified civil engineering and land surveying firm, said that he was not aware of such discrimination because "in the professional engineering business, we don't really bid on projects. We submit our interest in a project, and, then, based on qualifications [and] ability to do work, the city or county or government will make a short list of proposals received and then interview those folks to select one, and it's not really price-based."

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, said that he has not experienced "outright" denial of opportunities to bid, but "I [feel] like we are ... better-qualified than the guy who is getting the job."

Interviewee #37, the African American male owner of an engineering firm, stated that he is not aware of the denial of the opportunity to bid being a problem for MBE/WBE/DBE firms. He stated that he "can bid on a lot of projects he is not likely to get."

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, reported that he does not know of his clients being denied bid opportunities because "companies have learned how to be politically-correct in the terms of providing opportunities, but the results show that statistically over time minority firms are well under-represented with regard to ODOT work and a lot of other areas. The evidence is pretty clear."

C. Stereotypical attitudes on the part of customers and buyers.

Some interviewees reported having experienced or been aware of stereotypical attitudes on the part of customers and buyers. [Interviewees #: 2, 3, 9, 10, 13, 16, 29, 38, 41, 43, 44, 45, 46, TA #3, TA #4, TA #6, TA #7, TA #9, TA #10]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, said he thinks that there is prejudice toward DBEs.

Interviewee #9, the African American owner of a non-certified trucking company, indicated that there is probably a lot of discrimination in Oklahoma, especially against people who do not fit into a certain clean-cut image or look like the average guy in the industry. He said that it is important that people "fit in."

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, said that this is not a major barrier, but "occasionally, some of our people have had some really thick accents, so occasionally we have had problems. That's the single biggest complaint." He said, "I get a call once or twice a year, you know — 'This guy's got a really thick accent. I can barely understand him. Does he really know what he's doing?'"

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, reported that he had knowledge of stereotypical attitudes. He said that he often ran into stereotypes, such as "they work too slow, or they didn't come in when they were supposed to, when in fact a couple of times I knew that ... they didn't call the subcontractor until the day before, but they said, 'Hey, he was supposed to be here last week.' ... Or 'it took him too long to do that work,' or things of that nature."

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, said that he has experienced this when people are "ignoring your presence, ignoring what you have to offer." He said that some people think that if something is not their idea, "it's not acceptable."

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that he is aware of the stereotypical attitudes of some customers and buyers and that they are a problem for MBE/WBE/DBE firms that he has personally experienced. He stated that he has not worked on ODOT projects and cannot relate it to opportunities within ODOT.

Interviewee #38, the Native American female president of an engineering firm, stated that she is aware stereotypical attitudes on the part of customers and buyers are a problem for MBE/WBE/DBE firms. Interviewee #38 stated that the firm has had personal experience in this area and can directly relate this problem to opportunities with ODOT. She reported knowing a former ODOT employee, who was pro-Native American firms and did due diligence trying to assist minority firms to acquire contracts, but she stated "[the ODOT employee's efforts] fell on deaf ears."

Interviewee #41, the Hispanic male owner of a DBE-certified trucking firm, stated that because he does not speak perfect English, sometimes the firm experiences stereotypical attitudes on the part of customers and buyers, but he cannot directly or indirectly relate this problem to opportunities with ODOT.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that they are aware that stereotypical attitudes on the part of customers and buyers are a problem for MBE/WBE/DBE firms. Interviewee #43 stated that the firm has had personal experience in this area with ODOT personnel.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that they are aware that stereotypical attitudes on the part of customers and buyers are a problem for MBE/WBE/DBE firms. Interviewee #44 stated that the firm has had personal experience in this area because "people put you in a category." Interviewee #44 stated that they can directly relate stereotypical attitudes to work opportunities with ODOT.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that he is aware stereotypical attitudes on the part of customers and buyers are a problem for MBE/WBE/DBE firms. Interviewee #45 stated that a lot of the primes do not recognize that small firms can do the same job they can do. He stated that oftentimes MBE/WBE/DBE firms do a better job because people are expecting the MBE/WBE/DBE firm not to be up-to-par and therefore

they go the extra mile. Interviewee #45 stated that he cannot directly or directly relate this problem to opportunities with ODOT.

Interviewee #46, the African American male owner of a DBE-certified safety and environmental consulting firm, stated that he is aware of stereotypical attitudes on the part of customers or buyers being a problem for MBE/WBE/DBE firms. Interviewee #46 stated that "you can have these great meetings" and "they smile in your face" but nothing ever happens.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that this is a barrier. He said that African American engineers are often seen as not smart enough to be engineers. He stated that he thought that this perception was industry-wide.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, stated that the organization's members believe that stereotyping exists and that "they're held to a higher standard." He continued that the members feel that they have to "work twice as hard in order to make or keep the customer satisfied."

Interviewee TA #6, the president of a minority business development agency, stated that he is aware that stereotypical attitudes on the part of customers or buyers could be a problem for MBE/WBE/DBE firms in the local marketplace. He stated that his clients have had personal experiences with this problem, but he could not directly relate the problem to opportunities with ODOT.

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that her clients have had personal experience with this area of discrimination and that it relates to opportunities with ODOT.

Other interviewees reported no experience with or awareness of stereotypical attitudes on the part of customers and buyers. [Interviewees #: 1, 4, 5, 6, 7, 8, 11, 12, 14, 15, 17, 18, 19, 20, 21, 22, 25, 26, 27, 28, 30, 31, 32, 33, 34, 35, 36, 37, 39, 40, 42, 47, 48, TA #1, TA #2]. Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, reported that he has not encountered stereotypical attitudes on the part of customers or buyers lately.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that he is not aware of stereotypical attitudes on the part of customers and buyers being a problem for MBE/WBE/DBE firms, because usually the general public is not aware of a firm's DBE status. He added that the firm has not had any personal experience in this area.

D. Unfair denials of contract awards.

Some interviewees reported awareness of or experience with having been unfairly denied a contract award. [Interviewees #: 2, 8, 14, 16, 38, 43, 47, TA #3, TA #4, TA #5, TA #7, TA #9, TA #10]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, said that after two years of his firm bidding without success, he believes that there "has to be" some sort of unfair denial of contract awards.

Interviewee #8, the African American president and owner of a civil and structural engineering firm, said that he has not experienced this with ODOT, but he has had this occur. He said that this occurred when he worked in Stillwater in 1991 or 1992. He stated that "when you submit a bid, they don't know what color you are, but when they met me, all of a sudden, 'we're [going to go with the] best bid rather than low bid.' They changed it in the middle of the stream, and that ... really affected my company ... and I'm still suffering from that right now, I believe."

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, reported that he has not faced unfair denial of contract awards within the last 15 years, but he did in his earlier days.

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, said, "In some ... public places, there is not any [firm] criteria for selection." He said that he thinks that the public process is too subjective.

Interviewee #38, the Native American female president of an engineering firm, stated that she is aware that unfair denial of contract awards is a problem for MBE/WBE/DBE firms. Interviewee #38 stated that the firm has had personal experience in this area and can directly relate unfair denial of contract awards to opportunities with ODOT. Interviewee #38 stated, "We can't prove unfair denial [of contract awards]. They just say we didn't meet their criteria; we didn't have repeat business; we didn't have a long-history relationship with ODOT. Well, if we don't get one [contract] to at least show our performance and that we can fulfill the contract goals and can do a project from start to finish, there is no way to ever get into this cycle. We can't get in because we can't even get on this merry-go-round."

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that they are aware unfair denial of contract awards is a problem for MBE/WBE/DBE firms. Interviewee #43 stated that the firm has had personal experience in this area but cannot prove it. Interviewee #43 stated that in some instances, the prime contractor told them that they were the low bidder but they were not awarded the contract. Interviewee TA #43 stated that this problem is directly related to opportunities with ODOT.

Interviewee #47, the Caucasian female president of a WBE-certified trucking company, stated that she is aware of unfair denial of contract awards being a problem for MBE/WBE/DBE firms. Interviewee #47 stated that she has not had any personal experience in this area but can indirectly relate unfair denial of contract awards to opportunities with ODOT.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that one can "look at the numbers" after subtracting Caucasian women and see that there are unfair denials of contract awards.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, said that he knows of one entity that feels that it has experienced an unfair denial of contract awards. He said that he was unsure of whether it was unfair, but the organization looked at the procedures and process involved and the selection, and "there was nothing on the face of that that would indicate that that entity received any different treatment than anybody else."

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that he has seen unfair denials of contract awards and does believe the treatment is based on discrimination. Interviewee TA #5 stated he could not relate this problem to opportunities with ODOT.

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that her clients have had personal experience with this area of discrimination and that it relates to opportunities with ODOT.

Other interviewees reported no awareness of or experience with the unfair denial of contract awards. [Interviewees #: 1, 4, 5, 6, 7, 9, 10, 11, 12, 13, 17, 18, 19, 20, 21, 22, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 37, 39, 40, 41, 42, 44, 45, 46, 48, TA #1, TA #2, TA #6]. Interviewee #9, the African American owner of a non-certified trucking company, said that he does not know that this exists, but he cannot help but wonder when he never gets any work.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, reported that he is not aware of unfair denial of contracts awards being a problem for MBE/WBE/DBE firms. He said that the firm has not had any personal experience in this area, and he cannot directly relate unfair denial of contract awards to opportunities with ODOT. He stated that, although he cannot prove anything is not done objectively, he often wonders why a particular firm is awarded three consecutive ODOT contracts when he knows that his firm is just as qualified as the other firm to perform the work.

E. Unfair termination of contract.

Some interviewees reported being aware of or having experienced the unfair termination of a contract. [Interviewees #: 7, 14, 45, 48, TA #3, TA #6, TA #7, TA #10]. Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that he has not personally experienced this, but he has heard about it. He stated that when he has heard about this, he did not feel that he had all of the facts.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, reported that he is aware of the unfair termination of a contract after a project has been awarded. He said that if a prime wants a job, the prime should not go bid shopping after the award. He reported that they do, and he feels that it has happened to him. He said that in one situation a very large general contractor used the technical non-compliance of submittals as a material breach to terminate the contract. He said that he feels that the contractor was baited, and that was the trap in the contract that the prime was waiting to pull out.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that he is aware that unfair termination of contracts is a problem for MBE/WBE/DBE firms. Interviewee #45 stated that he is aware of an African American trucking firm that was working on a project and the prime contractor had not paid for work performed, claiming that the agency had not yet paid on the project. He stated that the small business could not continue to carry the project without payment so the prime contractor paid him to leave the project and got another contractor to complete the project. Interviewee #45 stated that he cannot say if the problem directly or indirectly relates to opportunities with ODOT.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that he is aware that unfair termination of contracts could be a problem for MBE/WBE/DBE firms. He stated that MBE/WBE/DBE firms will be working as a subcontractor yet they have no control over what the prime contractor and a division engineer decide to do on a project six months after it is awarded. Interviewee #48 stated that he has had personal experience with the unfair termination of a contract and can directly relate it to opportunities with ODOT.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that this can be a barrier and may be based on discrimination. He stated that it is "easy to get into a personality conflict when an inexperienced sub" does not know a prime.

Interviewee TA #6, the president of a minority business development agency, stated that he is aware that unfair termination of contracts is a problem for MBE/WBE/DBE firms. He stated that his clients have experienced being put on a prime contractor's bid response as a participating DBE and not being allowed to actually perform the work when that prime got the contract.

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that her clients have had personal experience with this area of discrimination and that it relates to opportunities with ODOT. She stated that it typically was not a real contract, and it was not work directly with ODOT but, rather, work with a subcontractor.

Other interviewees reported no awareness of or experience with the unfair termination of a contract. [Interviewees #: 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 13, 16, 17, 18, 19, 20, 21, 22, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 46, 47, TA #1, TA #2, TA #4, TA #5, TA #9].

F. Double standards in performance.

Some interviewees reported being aware of or having experienced double standards in performance. [Interviewees #: 3, 10, 16, 29, 37, 40, 43, 44, 45, TA #3, TA #4, TA #6, TA #7, TA #9, TA #10]. Interviewee #3, the Caucasian male president of a civil engineering firm, said: "In construction, in my opinion, they would be more apt to let something slide with a DBE" because the prime contractor is afraid that the DBE firm would file a claim against them. He stated that he has not seen this in the engineering field, however.

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, stated "We're seeing no more double standards in performance than any other firm opening up." He said that established companies are allowed more room for error than new companies and that "[t]here's a preference to stay by the old-guard companies. Now, I don't think that has anything to do with race; I think that just has to do with ... a level of comfort."

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, reported that he has experienced double standards in performance. He said, "Working with some of the local government[s]," he sees that his plans are "well-done, and ... I see somebody else's plans ... [and] they are lacking too many things, but we see nit-picking."

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that he is aware of double standards being a problem for MBE/WBE/DBE firms. He said that while he does not have personal knowledge relating it to opportunities within ODOT, he has experienced double standards himself.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, reported that he is aware of double standards in performance being a possible problem for MBE/WBE/DBE firms. He added that the firm has had personal experience in this area and that he believes that the firm has been required to turn in additional reports that others were not required to submit on ODOT projects.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that they are aware of double standards in performance being a problem for MBE/WBE/DBE firms. Interviewee #43 stated that the firm has had personal experience in this area and can directly relate the problem to opportunities with ODOT and that the barrier is related to discrimination.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that they are aware that double standards in performance are a problem for MBE/WBE/DBE firms. Interviewee #44 stated that the firm has had personal experience in this area and can say that the problem directly relates to opportunities with ODOT.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that he is aware that double standards in performance are a possible problem for MBE/WBE/DBE firms. He stated that prime contractors can demand more and get more because they are aware that small and minority firms are desperate for work. Interviewee #45 stated that the firm has had personal experience in this area but has refused many projects because he decides what he will and will not do. Interviewee #45 stated that he cannot say if the problem directly or indirectly relates to opportunities with ODOT.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that he has heard of this occurring and related that he had heard of "one engineering company ... [whose] work ... seemed to get a higher degree of scrutiny." He added that the research "shows that larger firms, on average, make as many if not more mistakes ... than small companies," but the established firms simply have longer-established relationships. He stated that the company was getting more scrutiny from ODOT than larger firms were.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, commented there is a perception that there is a difference in performance standards. He said, "Especially with minority contractors, you mess up, it seems that to climb out of the hole is steeper than if you're a non-minority contractor, and ... [there were] instances where other companies that had similar problems on performance on a contract were still getting contracts, and [minority contractors] were told that one of the reasons that they were not getting contracts or were getting few contracts was because of poor past performance." He added that it appeared that majority firms were able to turn around from mistakes while their member minority firm was not able to turn around as fast.

Interviewee TA #6, the president of a minority business development agency, stated that he is aware that double standards in performance are a problem for MBE/WBE/DBE firms in the local marketplace. He stated that his clients have complained about the problem, but he cannot directly relate it to opportunities with ODOT.

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that her clients have had personal experience with this area of discrimination and that it relates to opportunities with ODOT.

Other interviewees reported no awareness of or experience with double standards in performance. [Interviewees #: 1, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 17, 18, 19, 20, 21, 22, 25, 26, 27, 28, 30, 31, 32, 33, 34, 35, 36, 38, 39, 41, 42, 46, 47, 48, TA #1, TA #2, TA #5]. Interviewee #35, the Native American female president of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated that she is not aware of double standards in performance being a problem for MBE/WBE/DBE firms. She stated that overall ODOT has double standards and is inconsistent, but it does not relate to DBE firms.

G. Discrimination in payments.

Some interviewees reported being aware of or having experienced discriminatory practices with respect to payment including slow and non-payment. [Interviewees #: 2, 7, 18, 37, 43, 44, 45, TA #2, TA #3, TA #6, TA #7, TA #9, TA #10]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, said that discrimination in payment "very much" exists. He commented, "I perform the work; I do good work; and then I repeatedly make phone calls; I send invoices ... and it's like I have to beg [for payment]." He said that just before he has to file a lien he will receive payment. Interviewee #2 said that he believes that his issues related to receiving payment are due to the fact that he is a DBE.

Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that he is not aware of this being based on discrimination, but he does think that this occurs because "the squeaky wheel gets the grease," and often "small businesses may not have the leverage that they should have to get paid more promptly."

Interviewee #18, the Caucasian male treasurer of a Caucasian male-owned heavy paving and grading construction firm, said that he works with DBEs that perform work for other primes and have difficulty in getting paid, but he does not know whether it is an issue that relates to quality of work.

Interviewee #37, the African American male owner of an engineering firm, stated that he is aware that discrimination in payments is a problem for MBE/WBE/DBE firms but cannot directly relate discrimination in payments to opportunities with ODOT.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that that they are aware discrimination in payments is a problem for MBE/WBE/DBE firms. Interviewee #43 stated that the firm has had personal experience in this area and can directly relate the problem to opportunities with ODOT and the behavior of ODOT personnel.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that they are aware that discrimination in payments is a problem for MBE/WBE/DBE firms. Interviewee #44 stated that African American firms have to work for less money than Caucasian firms. Interviewee #44 stated that the firm has had personal experience in this area and can say that the problem directly relates to opportunities with ODOT.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that he is aware discrimination in payments is a problem for MBE/WBE/DBE firms. Interviewee #45 stated that the firm has not had any personal experience in this area because he works on a much smaller scale but knows of other minority firms that work on a much larger scale that constantly have problems getting paid on projects, ultimately requiring intervention by the ODOT Office of Civil Rights.

Interviewee TA #2, the executive director of a Hispanic trade association, said that this may have occurred when people provide bad checks.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that smaller businesses tend to struggle to get paid by the State.

Interviewee TA #6, the president of a minority business development agency, stated that he is aware that discrimination in payments is a problem for MBE/WBE/DBE firms in the local marketplace.

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that her clients have had personal experience with this area of discrimination and that it relates to opportunities with ODOT.

Other interviewees reported no awareness of or experience with discrimination in payment. [Interviewees #: 1, 3, 4, 5, 6, 8, 9, 10, 11, 14, 17, 19, 20, 21, 22, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 38, 39, 40, 41, 42, 46, 47, 48, TA #1, TA #4, TA #5]. Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that the City has been slow in payment, but he said that this is not based on discrimination.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, reported that payment is slow overall, but he said that ODOT moved very fast when he has done work for them in the past.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that he is not aware of discrimination in payments being a problem for MBE/WBE/DBE firms. He stated that he has had personal experience with untimely payment, but not because he was a DBE.

H. Other predatory business practices.

Some interviewees reported being aware of or having experienced predatory business practices. [Interviewees #: 7, 9, 16, 29, 38, TA #2, TA #6, TA #10]. Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that he has not experienced it firsthand, but often primes that have done business with an agency for a long time do not send the subcontracting work where it is supposed to go. He commented that the agency needs to have the ability to punish primes when this happens. He added that some "large companies disguise

themselves as small businesses." He stated that "over \$4 billion worth of small business set-aside contracts ... went to large businesses last year, and that was reported by the Washington Post."

Interviewee #9, the African American owner of a non-certified trucking company, said that companies hook their "buddies all the time" and hurt other businesses.

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, said that he has seen predatory business practices "to some degree."

Interviewee #29, the African American male owner and operator of a DBE certified trucking firm, stated that another predatory business practice faced by MBE/WBE/DBE firms in the local marketplace includes prime contractors dragging out the contracts and work so long that it becomes unprofitable for the small business owner.

Interviewee #38, the Native American female president of an engineering firm, stated that she is aware of predatory business practices being a problem for MBE/WBE/DBE firms. She stated that national firms offer ODOT employees higher pay to leave and create a 'brotherhood' and those national firms get the ODOT projects.

Interviewee TA #2, the executive director of a Hispanic trade association, said that paying with bad checks is a big problem within the Hispanic community.

Interviewee TA #6, the president of a minority business development agency, stated that other predatory business practices include a non-cooperative environment, principally coming from the prime to the subcontractor, making it impossible for the subcontractor to work, and this practice tends to force the subcontractor off the project. He stated that he has had clients that were contracted as a subcontractor to do construction cleanup and that the prime on that project refused to allow the subcontractor access to the water on the project site. He reported that the subcontractor was forced to get water from another location. He believes the non-cooperative environment is based on discrimination, but he said that he cannot directly relate it to opportunities with ODOT.

Other interviewees reported no awareness of or experience with predatory business practices. [Interviewees #: 1, 2, 3, 4, 5, 6, 8, 10, 11, 12, 13, 14, 17, 18, 19, 20, 21, 22, 25, 26, 27, 28, 30, 31, 32, 33, 34, 35, 36, 37, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, TA #1, TA #3, TA #4, TA #5]. Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, said that in his almost three years with the trade association, "I am not aware of one [predatory business practice] that has been brought to my attention."

I. Unfavorable work environment for minorities or women.

Some interviewees reported being aware of or having experienced an unfavorable work environment for minorities or women. [Interviewees #: 2, 4, 7, 11, 13, 14, 16, 20, 29, 32, 36, 42, 44, 45, 47, TA #2, TA #4, TA #5, TA #7, TA #10]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, stated that he was aware of an unfavorable work environment for women and minorities.

Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, reported that he has attended mandatory pre-bid conferences where people have made comments or gestures toward

him indicating that he would get the job based on the fact that he is Hispanic. He reported that he may be the only Hispanic person out of 15 attendees, and so the business owners focus on him. He stated that this does not bother him.

Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that he has not personally experienced an unfavorable work environment for women and minorities, but he is aware of it.

Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, said that he thinks that there is an unfavorable work environment for women. She said that she has talked to people, and they would rather talk to the vice president, who is a man, than her even though she knows how to do a job. She said that she thinks that they would rather speak to the estimator than her just because she is a woman.

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, reported that the work environment is not as good as it could be. He commented, "You have a few that have some good relationships, ... but then ... there are some people that you don't have a good relationship with, and it's not the best environment and some old attitudes surface. I wouldn't necessarily call it hostile, but I don't think it's welcoming or encouraging. But ... dealing with ODOT so far ... they've been excellent to work with."

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, reported that he was aware of unfavorable work environments for minorities and women in the past but not in the last 15 years. He said that he thinks that those attitudes are still there, but he said that although there have been true advances and less discrimination, there continues to be quiet and silent discrimination.

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, commented "There are some ignorant people who" engage in harassment.

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, said that there are instances of an unfavorable work environment at ODOT, but the work environment with ODOT is much less strenuous than in the private sector or with federal agencies. He stated that when an unfavorable work environment occurs at ODOT, there are no consequences.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that he is aware of and has had personal experience with unfavorable work environments, but he said that he cannot relate it to opportunities within ODOT.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that she is aware of unfavorable work environments for minorities or women being a problem for MBE/WBE/DBE firms. She also reported that she has not had any personal experience in this area and cannot relate it to opportunities with ODOT.

Interviewee #36, a Caucasian female senior engineer of an engineering firm, stated that she did experience unfavorable work environments for minorities or women when she started her career, but within the last 10 years it has improved. She stated that she cannot relate unfavorable work environments for minorities or women to opportunities with ODOT.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that she is aware of unfavorable work environments for minorities or women being a problem for MBE/WBE/DBE firms. She reported that the firm has not had any personal experience in this area, and cannot say if the problem directly or indirectly relates to opportunities with ODOT.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that they are aware that unfavorable work environments for minorities or women are a problem for MBE/WBE/DBE firms. They stated that they experience offensive comments all the time such as "that black so-and-so" and they reported being called the 'n word' to their faces. Interviewee #44 stated that the firm can say the problem directly relates to opportunities with ODOT.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that he is aware unfavorable work environments for minorities or women is a problem for MBE/WBE/DBE firms. Interviewee #45 stated that the firm has had personal experience in this area. He stated that primes overload his trucks, which causes damage to the trucks. Interviewee #45 stated that he cannot say if the problem directly or indirectly relates to opportunities with ODOT.

Interviewee #47, the Caucasian female president of a WBE-certified trucking company, stated that she is aware of unfavorable work environments for minorities or women being a problem for MBE/WBE/DBE firms. She stated that she has had personal experience with unfavorable work environments for women and can directly relate unfavorable work environments for minorities and women to opportunities with ODOT.

Interviewee TA #2, the executive director of a Hispanic trade association, said that he is sure that this goes on, but he could not provide a particular example.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, said that he has "heard that women subcontractors feel a little uneasy with some of the contractors." He say that this may be attributable to "the 'Good Old Boy' mentality." He said that others may have the "perception that women shouldn't be doing this kind of work."

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that he is aware of an unfavorable work environment for minorities or women, and said that he had personal knowledge of it existing through his clients and in relation to ODOT.

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that her clients have had personal experience with this area of discrimination and that it relates to opportunities with ODOT.

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that she is aware that unfavorable work environments for minorities and women are a problem for MBE/WBE/DBE firms. She stated that her clients have had personal experiences with unfavorable work environments for minorities and women and she can directly relate the problem to opportunities with ODOT.

Other interviewees reported no awareness of or experience with an unfavorable work environment for minorities or women. [Interviewees #: 1, 3, 5, 6, 8, 10, 15, 17, 18, 19, 21, 22, 25, 26, 27, 28, 30, 31, 33, 34, 35, 37, 38, 39, 40, 41, 43, 46, 48, TA #1, TA #3, TA #6]. Interviewee #8, the African American president and owner of a civil and structural engineering firm, said that he has not experienced this in recent years. He said that the only time that he has experienced this was in another state.

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, said, "As my career has progressed, most of the contractors have become much more knowledgeable about [unfavorable work environments], and they will treat the women better than they will the men."

Interviewee #15, the Caucasian male co-owner and manager of an engineering firm, said "You [have to] realize you're in Oklahoma.... This is just a 'Good Old Boy' state." He said that in Oklahoma people "use terminology that someone in California would consider racial, but here it's not. Their intent was good.... They don't mean anything by it."

Interviewee TA #6, the president of a minority business development agency, stated that he is not aware of an unfavorable work environment for minorities or women being a problem for MBE/WBE/DBE firms in the local marketplace. He stated that this is not a problem about which his clients have reported any personal experience, and he cannot comment about whether it is a problem for opportunities with ODOT.

J. The 'Good Old Boy Network' or other closed networks.

Some interviewees reported knowledge of or experience with a 'Good Old Boy Network' or other type of closed network. [Interviewees #: 2, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 20, 28, 29, 30, 31, 32, 34, 35, 36, 37, 38, 40, 42, 43, 44, 45, 46, 47, 48, TA #2, TA #3, TA #4, TA #5, TA #6, TA #7, TA #9, TA #10]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, said that there is a 'Good Old Boy Network' in Oklahoma and "it is run through the AGC." He said that it is an organization formed by the general contractors, and they act like a football team; "if you're not on that team, how are you going to compete?"

Interviewee #5, the Caucasian male co-owner of a geotechnical engineering firm, said "I thrive in the 'Good Old Boy Network.' That's where my referrals come from. That's what we are." He added, "I don't think that has anything to do with discrimination or anything like that. It's just ... knowing people.... Doing work with people that know you and you know them."

Interviewee #6, the African American owner of a DBE-certified trucking company, stated that although he has not personally experienced this, he has heard about it. He added that he has not heard of this involving discrimination, but "there's no way of knowing" if or why it occurs.

Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that he has heard of the 'Good Old Boy Network' existing in Oklahoma generally.

Interviewee #8, the African American president and owner of a civil and structural engineering firm, said, "I'm certain ... that exists." He said that he does not know of a time when it has caused him to be denied work, but he thinks it exists. He said, "People usually like to work with who they

like to work with, and it's quite possible that someone might not get a job because I like to work with this electrician over here, but I don't know what to do about that. People like to work with who they like to work with."

Interviewee #9, the African American owner of a non-certified trucking company, said that this is "the main problem in Oklahoma.... The same people" always have the contracts. He added that majority companies are even seeking out minority work by "send[ing] their wives to get the work as the minority."

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, reported that the company has lost projects as a result of the 'Good Old Boy Network.' He stated that the company has knowledge of a firm that he believed engaged in false reporting, but he claimed "because the owner of that firm was a good friend of several of the officials down at the DOT, he ended up getting contracts with DOT in one year after he opened." He said that they recently lost a project to a competitor who "claimed they had 12 ODOT-certified technicians. We checked with ODOT" and found out that they only had two, so "a lot of the information that's being presented to ODOT" is not true and is not being confirmed.

Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, reported that the 'Good Old Boy Network' is alive and well. He said that there is a lot favoritism going on. He stated that he called a contractor once to get some information about bidding on a job, and the contractor told him that he did not have time to provide that information.

Interviewee #12, the owner of a female-owned non-certified civil engineering and land surveying firm, said that he does believe that a 'Good Old Boy Network' exists in his industry because "the people in government agencies are just like everyone else. They're comfortable with people that they're familiar with and are acquainted with, and so it's hard for a person who doesn't have the experience to get in on that network."

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, said that he does think that a 'Good Old Boy Network' exists in his industry. He added that some of this is based on "relationships that go back years and years, and unfortunately, a lot of times in America, that can mean that that goes back to a time when no African Americans were involved ... couldn't be involved in those relationships." He said that he thinks that it has a lot to do with relationships, and with America's history, that often means that it excludes minorities.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, reported that the 'Good Old Boy Network' exists in the industry. He reported that he has not had any personal recent experience with it.

Interviewee #15, the Caucasian male co-owner and manager of an engineering firm, said that he has heard rumors of a 'Good Old Boy Network,' but he has not experienced it yet. He said that he's "just getting his foot in the door."

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, reported that there "used to be" a 'Good Old Boy Network' in Oklahoma.

He added, "I started in 1972," but he said that he has seen a lot of reform, and now the network is "not very visible."

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, said that small and new businesses will never have an opportunity to compete until the 'Good Old Boy Network' is broken up. He said that a paving association hires lobbyists and works closely with ODOT to create a system that he believes excludes businesses and people that are not members of their club. He identified an instance of what he describes as "price fixing" in which he claims the asphalt and paving association allegedly worked with ODOT to require the purchase of asphalt from a particular supplier regardless of the cost, thus excluding competition on ODOT projects.

Interviewee #28, the Native American female president of a trucking and excavating firm, stated that she is aware of the 'Good Old Boy Network' or other closed networks being a problem for MBE/WBE/DBE firms. She stated that the firm has had personal experiences in this area because when the "big boys" participate in the bid letting, the primes inform her company that its bid was too high. She stated that she does not believe that the firm's bid was too high. She said that she cannot directly or indirectly relate the 'Good Old Boy Network' or other closed networks to opportunities within ODOT.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that he believes that the 'Good Old Boy Network' exists within ODOT. He said that he has personal knowledge and experience of it existing and affecting minority and women-owned firms.

Interviewee #30, the Caucasian male co-owner of a transportation firm, reported that "they have a little clique, you know, and if you're not in their clique, they don't even want to talk to you." Interviewee #30 stated that he has personal experience with the closed networks, but he could not directly relate it to any opportunities with ODOT because he has never worked nor attempted to work for ODOT.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated that she is aware of the 'Good Old Boy Network' or other closed networks being a problem for MBE/WBE/DBE firms. She stated that she is "sure it (the 'Good Old Boy Network') exists." She stated that she has not personally experienced the 'Good Old Boy Network' or other closed networks. Interviewee #31 stated that she could not relate the 'Good Old Boy Network' or other closed networks to opportunities with ODOT because her firm has not had any experience with ODOT.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that she is aware of the 'Good Old Boy Network' or other closed networks being a problem for MBE/WBE/DBE firms, although she has not had any personal experience in this area. Interviewee #32 stated that she cannot relate the 'Good Old Boy Network' or other closed network to opportunities with ODOT.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm, stated that he was aware of the 'Good Old Boy Network' or other closed networks being a problem for MBE/WBE/DBE firms in the private sector. He stated that he has had personal experience in this area but cannot relate it to opportunities with ODOT.

Interviewee #35, the Native American female president of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated that she is aware of the 'Good Old Boy Network' or other closed networks being a problem for MBE/WBE/DBE firms. She stated that the firm has had personal experiences in this area and she attributes a lot of ODOT's problems with consistency to the 'Good Old Boy Network' or other closed networks. Interviewee #35 stated that she can directly relate the 'Good Old Boy Network' or other closed networks to opportunities within ODOT because "if you are playing or going to lunch a couple days a week or something or a couple times a month with certain people, then they overlook a lot of the inconsistencies in your contract."

Interviewee #36, a Caucasian female senior engineer of an engineering firm, stated that she is aware of the 'Good Old Boy Network' and other closed networks existing based on geographic issues which tend to center around local individuals and clubs. She stated she has had personal experience with closed networks but cannot relate it to opportunities within ODOT.

Interviewee #37, the African American male owner of an engineering firm, stated he is aware of the 'Good Old Boy Network' and other closed networks being a problem for MBE/WBE/DBE firms. He stated that he has had personal experience in this area and can directly relate it to opportunities with ODOT. He stated there is a lot of work he could do with some of the larger primes, but "they won't give me the time of day" because they know they do not have to, because "they are part of the 'Good Old Boy System."

Interviewee #38, the Native American female president of an engineering firm, stated that she is aware that the 'Good Old Boy Network' or other closed networks is a problem for MBE/WBE/DBE firms and the network "is alive and well." Interviewee #38 stated that the firm has had personal experience in this area and can directly relate the 'Good Old Boy Network' to opportunities with ODOT.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, reported that he is aware of the 'Good Old Boy Network' or other closed networks being a problem for MBE/WBE/DBE firms. He said that the firm has not had any personal experience in this area but believes that politics play a big role in the 'Good Old Boy Network' and other closed networks affecting business, and that ODOT is not immune to such influences.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that she is aware of the 'Good Old Boy Network' or other closed networks being a problem for MBE/WBE/DBE firms. She reported that the firm has not had any personal experience in this area and cannot directly or indirectly relate the 'Good Old Boy Network' or other closed networks to opportunities with ODOT.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that they are aware of the 'Good Old Boy Network' or other closed networks being a problem for MBE/WBE/DBE firms. Interviewee #43 stated that the firm has had personal experience in this area and can directly and indirectly relate the 'Good Old Boy Network' or other closed networks to opportunities with ODOT.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that they are aware that the 'Good Old Boy Network' or other closed networks are a problem for MBE/WBE/DBE firms. Interviewee #44 stated that the firm has had personal experience in this area and he relates his experience with the 'Good Old Boy Network' or other closed networks to opportunities with ODOT.

Interviewee #46, the African American male owner of a DBE-certified safety and environmental consulting firm, stated he is aware of the 'Good Old Boy Network' and other closed networks being a problem for MBE/WBE/DBE firms. He stated that he has had personal experience in this area and can directly relate it to opportunities with ODOT. He stated that he has not received any jobs with ODOT but "the 'Good Old Boys' continue to get work with ODOT."

Interviewee #47, the Caucasian female president of a WBE-certified trucking company, stated that she is aware of the 'Good Old Boy Network' or other closed networks being a problem for MBE/WBE/DBE firms. She stated that she has had personal experience with the 'Good Old Boy Network' as a barrier and can relate the 'Good Old Boy Network' or other closed networks directly to work opportunities with ODOT.

Interviewee TA #2, the executive director of a Hispanic trade association, said that he has "heard it goes on in Oklahoma," but he was not familiar with it.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that general contractors are usually part of a 'Good Old Boy Network.' He added, "It's just not a comfortable environment." He said that the network is present "across the board."

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, stated that the organization's members feel very strongly that the 'Good Old Boy Network' exists and that this network has "too much sway and say" about who gets contracts in the community. He reported that the members say that it is better than it was 20 or 30 years ago, but "they still feel it's a factor."

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that he is aware of the 'Good Old Boy Network' being a barrier for firms and believes it relates directly to opportunities with ODOT. He stated he has personal knowledge of and experience with it existing and affecting minority and women-owned firms.

Interviewee TA #6, the president of a minority business development agency, stated that he is aware that the 'Good Old Boy Network' or other closed networks are a problem for MBE/WBE/DBE firms and with which his clients have had personal experience. Interviewee TA #6 stated that the 'Good Old Boy Network' directly relates to opportunities with ODOT.

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that her clients have had personal experience with this area of discrimination and that it relates to opportunities with ODOT.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that he is aware that the 'Good Old Boy Network' or other closed

networks are a problem for MBE/WBE/DBE firms. He said that clients report that the same WBE contractors are used repeatedly on projects and that no DBE firms are being used. He stated that he can directly relate this to ODOT projects.

Some interviewees indicated that they had no knowledge of or experience with the 'Good Old Boy Network.' [Interviewees #: 1, 3, 4, 17, 18, 19, 21, 22, 25, 26, 27, 33, 39, 41, TA #1]. Interviewee #19, the Caucasian male chief engineer of a Latino male-owned bridge design engineering firm, said that there is always talk of a 'Good Old Boy Network' but that he does not necessarily believe that it is true. He stated that it seems certain consultants get more work than others, but he also thinks those firms do excellent work, which is part of the reason they get more work.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, said that he was "[a]bsolutely not [aware of any discrimination related to the 'Good Old Boy Network.'] We have very open ... and honest dialogue and exchange, and everyone gets our message and our e-mails and magazines no matter how small or large." He said that he does not even know which of his members are DBE certified, because he does not characterize his members by their DBE status.

K. Governmental resistance to use of MBE/WBE/DBEs.

Some interviewees reported being aware of or having experienced governmental resistance to the use of MBE/WBEs. [Interviewees #: 2, 7, 13, 16, 29, 37, 38, 42, 44, TA #5, TA #6]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, stated that government resistance to the use of DBEs "is a problem." He stated that he had encountered such resistance in the context of federal work on military bases. He said that he had not seen this issue with ODOT.

Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that he would not call it governmental resistance, but there is "a lack of understanding." He added that the contracting officers within an agency get comfortable working with particular companies that have "worked satisfactorily or above expectation for them in the past," and "there's a psychological tendency to go that way."

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, stated that he does think that there is general resistance to the use of MBE/WBE/DBE firms. He said, "If you ask most people [about the DBE Program], they think that's some form of preferential treatment that's not earned, so when they hear 'a DBE,' they just think automatically you're giving non-qualified people work."

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, said, "I didn't get any [work] being a DBE. What can you say."

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that he is aware of governmental resistance to using MBE/WBE/DBE's being a problem for MBE/WBE/DBE firms. He reported that he has had experienced with this problem, but he said that he cannot relate it to any opportunities within ODOT because he has not worked with ODOT to date.

Interviewee #37, the African American male owner of an engineering firm, stated that he is aware of government resistance to the use of MBE/WBE/DBEs being a problem for MBE/WBE/DBE firms. He stated that he has had personal experience in this area and can directly relate it to opportunities with ODOT. He commented, "ODOT could do more if they wanted to, but [they] probably don't want to go out of their way to help someone get more work with ODOT."

Interviewee #38, the Native American female president of an engineering firm, stated that she is aware that governmental resistance to the use of MBE/WBE/DBEs is a problem for MBE/WBE/DBE firms. Interviewee #38 stated that the firm has had personal experience in this area and can directly relate the problem to opportunities with ODOT.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that she is aware of governmental resistance to the use of MBE/WBE/DBEs and that she has this opinion after having previously worked for the government. She added that the firm has not had any personal experience in this area and cannot directly or indirectly relate the problem to opportunities with ODOT.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that he is aware of governmental resistance to using MBE/WBE/DBEs, which affects minority and women-owned firms. He stated that his clients have had personal experience with this barrier and that the barrier exists as related to opportunities within ODOT. He stated that his perception is that "[ODOT] falsely don't recognize their own practices as discriminatory and only do what they absolutely can get by with in order to satisfy somebody's numbers in Washington."

Interviewee TA #6, the president of a minority business development agency, stated that he is aware that governmental resistance to the use of MBE/WBE/DBE is a problem for MBE/WBE/DBE firms in the local marketplace. Interviewee TA #6 stated that his clients have personal experience in this barrier and that governmental resistance to the use of MBE/WBE/DBEs directly relates to opportunities with ODOT.

Other interviewees reported no awareness of or experience with governmental resistance to the use of MBE/WBE/DBEs. [Interviewees #: 1, 3, 4, 5, 6, 8, 9, 10, 11, 14, 15, 17, 18, 19, 20, 21, 22, 25, 26, 27, 30, 31, 32, 33, 34, 35, 36, 39, 40, 41, 43, 45, 46, 47, 48, TA #1, TA #2, TA #3, TA #4, TA #10]. Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that he was not aware of governmental resistance to using MBE/WBE/DBEs, and, on the contrary, that governmental entities are trying to help the minorities.

Interviewee #8, the African American president and owner of a civil and structural engineering firm, said, "It still boils down to people's mindset because I don't believe that the government" is resistant, but the people in charge may be. He said that he has "not experienced anything of that nature with ODOT. The only thing that I experienced with ODOT that ... to me appeared to be a form of discrimination would be [implementing] that good faith effort," which only required a showing of attempted contact with a minority company. He said, "In the early days of good faith effort, the intent was to snow ODOT, and ODOT allowed it by not doing any follow-up."

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, said not there is no government resistance to the use of MBE/WBE/DBEs, but he

said that the government's attitude is, "we're not going to hold your feet to the fire to make sure" you meet the goal, "and we're not going to go overboard to make any effort to make sure you meet the goal."

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, reported that he is not aware of and has not experienced governmental resistance to the use of DBEs. In fact, he said that just the opposite is true.

Interviewee #35, the Native American female president of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry stated that she is not aware of governmental resistance to use of MBE/WBE/DBE being a problem for MBE/WBE/DBE firms. She stated, "I think we have a really good DBE office. I think their hands have been tied by ODOT."

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that he is not aware of governmental resistance to the use of MBE/WBE/DBEs being a problem for MBE/WBE/DBE firms. He stated that his firm has not had any personal experience in this area and cannot directly or indirectly relate the problem to opportunities with ODOT. He added that there is not a lot of information being circulated anymore about DBE projects and DBE goals.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that he is not aware of the governmental resistance to the use of MBE/WBE/DBEs is a problem for MBE/WBE/DBE firms. Interviewee #45 stated that the government is making an effort to include DBE firms. He stated that he does not think the government is discriminating but the prime contractors are discriminating.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that he was not aware of governmental resistance, but "ODOT talks a good game. They want to [use MBE/WBE/DBEs], but their record doesn't show it."

L. MBE/WBE and DBE fronts or fraud.

Some interviewees reported experience with or awareness of the existence of MBE/WBE/DBE fronts or other fraud. [Interviewees #: 2, 7, 8, 9, 14, 17, 18, 20, 23, 29, 32, 35, 37, 38, 39, 42, 43, 44, 45, 46, 47, TA #3, TA #4, TA #5, TA #6, TA #7, TA #9, TA #10]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, said that there are "a lot of" DBE fronts and frauds and "a lot of loopholes" in the DBE Program. Interviewee #2 said that "a lot of the DBE contractors are the same families — the wives — [of the men] that own the big general contractors." He said that this is a loophole. He stated, "I'm not saying that that is wrong, but where do we stand as a true minority?" He also said that he believes the general contractors focus on the project that they are going to get, and ODOT already knows who the DBE subcontractor is going to be.

Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that this is a bad problem. He reported that "there's companies out there that use ... pass-throughs." He said that companies work with minority or disadvantaged businesses in order to get the job, but even though the government requires that the disadvantaged or minority company do at least 51 percent

of the work in order to claim the certification, there is not enough enforcement, so it often goes unchecked unless there is a protest. He added that he has not heard about this problem specifically with ODOT.

Interviewee #8, the African American president and owner of a civil and structural engineering firm, said that he has heard of DBE fronts or frauds. He said, "It's always something that is out there."

Interviewee #9, the African American owner of a non-certified trucking company, said, "A lot of these guys are sending their wives in there and getting the minority work, and that's taking all of the minority work from the real minorities, and that's a real problem that [is going] on." He said that he has seen a lot of husbands set up companies in the wife's name. He said that it occurs in all work and not just ODOT work.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, reported that he is not aware of fronts or frauds existing recently, but he said that he was aware of their existence in the past.

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, said that he was aware of DBE fronts or frauds. He stated that "there is a lot of talk about [minorities] owning a business but [they] don't run it." He stated that he did not know whether this was true; he stated that it is mostly in the trucking business, but his firm does not really deal with trucking companies.

Interviewee #18, the Caucasian male treasurer of a Caucasian male-owned heavy paving and grading construction firm, said that DBE fronts or frauds were a problem in the 1970s and 1980s but that he is not aware of it happening in recent years.

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, said he sees fronts and frauds, where a company is listed in the name of a wife that does not run the business "regularly."

Interviewee #23, the African American male owner of a DBE/SDBE/MBE-certified security, construction, and food service firm, stated that he had some limited experience with a couple of firms that appeared to be WBE fronts or frauds. He stated that one example was a woman-owned construction firm where the woman in charge clearly had no construction knowledge or experience.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that he is aware of DBE/WBE/WBE front or frauds existing and that he knows firsthand of companies that are guilty of this. Interviewee #29 stated that this problem is rampant through ODOT and affects the opportunities within ODOT. Interviewee #29 reported that he is aware of the large contractors setting their wives up in DBE trucking companies in order to meet the DBE goal by giving all the contracts to trucking companies owned by their wives.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that she recently heard about companies creating DBE firms to funnel work through them, although she has not had any personal experience in this area and cannot relate it directly to opportunities with ODOT.

Interviewee #35, the Native American female president of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated that she is aware of MBE/WBE/DBE fronts or fraud being a problem for MBE/WBE/DBE firms. She stated that she is aware of some DBE fronts or frauds that have actually obtained DBE certification and has even spoken to ODOT staff to verify standard industry practices regarding an illegitimate firm seeking DBE certification.

Interviewee #38, the Native American female president of an engineering firm, stated that she is aware of MBE/WBE/DBE fronts or frauds being a problem for MBE/WBE/DBE firms. She stated that the firm has had personal experience in this area and can directly relate MBE/WBE/DBE fronts or frauds to some of the firms receiving opportunities with ODOT.

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that she is aware of MBE/WBE/DBE fronts or frauds being a problem for MBE/WBE/DBE firms. Interviewee #38 stated that the firm has had personal experience in this area and is familiar with several such firms, and can directly relate MBE/WBE/DBE fronts or frauds to opportunities with ODOT.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that she is aware of MBE/WBE/DBE fronts or frauds being a problem for MBE/WBE/DBE firms. She reported that the firm has not had any personal experience in this area, but she is familiar with a particular firm that has received a lot of ODOT work even though it was previously banned by ODOT and simply changed its name and continued to get more ODOT work.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that they are aware of MBE/WBE/DBE fronts or frauds being a problem for MBE/WBE/DBE firms. Interviewee #43 stated that the firm has had personal experience in this area and is familiar with several such firms that have been certified by ODOT. Interviewee #43 stated that he believes those are the firms that are receiving most of the ODOT contract dollars.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that they are aware of MBE/WBE/DBE fronts or frauds being a problem for MBE/WBE/DBE firms. Interviewee #44 stated that the firm has had personal experience in this area all the time. He stated, "I think it is more prevalent with ODOT than any other government agency," and he can directly relate MBE/WBE/DBE fronts or frauds to opportunities with ODOT.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that he is aware of MBE/WBE/DBE fronts or frauds being a problem for MBE/WBE/DBE firms. Interviewee #45 stated that he is aware of a prime construction contractor who set his wife up in a trucking company to meet the DBE requirement. He reported that there is an asphalt firm that does a lot of state asphalt work and the owner of that firm started a trucking company for his wife. He reported that she received her certification for the newly-formed trucking company. He stated that he is aware of yet another prime contractor who is giving all of their work to one DBE firm that belongs to his wife. He stated that the larger companies have the DBE participation built in and do not intend to earnestly participate in the DBE process. He stated he can relate the problem to opportunities with ODOT.

Interviewee #46, the African American male owner of a DBE-certified safety and environmental consulting firm, stated that he is aware of and has heard of MBE/WBE/DBE fronts and frauds being a problem for MBE/WBE/DBE firms. He stated that he has not had any personal experience in this area but believes it directly relates to work opportunities with ODOT.

Interviewee #47, the Caucasian female president of a WBE-certified trucking company, stated that she is aware of MBE/WBE/DBE fronts and frauds being a problem for MBE/WBE/DBE firms. She stated that she is aware of a woman-owned trucking company that has men run the business. She stated that she can relate MBE/WBE/DBE fronts and frauds directly to work opportunities with ODOT.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, reported that he is quite certain that DBE fronts or frauds exist. He said that he questions whether ODOT investigates this problem. He stated that he believes that it is a self-policing system, and that does not work.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, said that he has heard allegations that some Caucasian married women who are associated with families are simply fronts for the family members that actually do the work.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that he is aware of MBE/WBE/WBE fronts and fraud being a problem for firms. He stated that, although he cannot say with certainty that front or frauds exist, his perception is that they do exist. He stated that his clients have not reported personal experience with this problem; however, he believes that it directly affects opportunities with ODOT.

Interviewee TA #6, the president of a minority business development agency, stated that he is aware that MBE/WBE/DBE fronts or frauds exist and that they are a problem for bona fide MBE/WBE/DBE firms. He reported that his clients have had personal experience with MBE/WBE/DBE fronts or frauds, but he cannot directly relate the problem to opportunities with ODOT.

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that her clients have had personal experience with this area of discrimination and that it relates to opportunities with ODOT.

Other interviewees reported no knowledge of or experience with MBE/WBE/DBE fronts or fraud. [Interviewees #: 1, 3, 4, 5, 6, 10, 11, 12, 13, 15, 16, 19, 21, 22, 25, 26, 27, 28, 30, 31, 33, 34, 36, 40, 41, 48, TA #1, TA #2]. Interviewee #3, the Caucasian male president of a civil engineering firm, said that he knew that there were not any DBE fronts or frauds in the engineering industry, but he said he did not know whether any exist in the construction industry.

Interviewee #6, the African American owner of a DBE-certified trucking company, stated, "One thing I like about ODOT's DBE process, the people that are running ... the regulatory services, they're pretty thorough in making sure that" they prevent fraud.

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, said that he was not aware of fronts or frauds, but he commented, "When

you have a company who ... does a lot of work for ODOT, and then an off-shoot of that company is that CEO's wife who owns that company, and she's doing a lot of work under the [WBE status]. To me, it's all the same pot. Yes, you can set up a corporation where she's 60 percent owner, but if you know she's the spouse of somebody who's a multi-million dollar company ... legally, is it right? Yes, but she has some advantages that I may not have.... So I know about those instances.... I mean, legally, ODOT allows it, but is that truly the intent of the DBE Program or the WBE program? That's a bigger question." He asked, "Is she truly disadvantaged?"

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, reported that he is not aware of MBE/WBE/DBE fronts or frauds being a problem for MBE/WBE/DBE firms. He added that the firm has not had any personal experience in this area, but he is aware of firms that have been decertified after ODOT determined the firm was not an actually a DBE firm.

M. False reporting of MBE/WBE participation or falsifying good faith efforts.

Some interviewees reported that they were aware of or have had personal experience with false reporting of MBE/WBE/ DBE participation or falsifying good faith efforts. [Interviewees #: 2, 4, 7, 8, 11, 13, 29, 32, 34, 37, 40, 42, 43, 44, 45, 47, 48, TA #4, TA #5, TA #6, TA #7, TA #9, TA #10]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, asked, "If the [general contractors] are showing good faith efforts ..., why are they not awarding jobs to DBEs such as [my firm] and other true disadvantaged businesses?"

Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that he was aware of false reporting of DBE participation. He reported that there was a company that hired his firm because he was a DBE; his contract was originally for \$60,000, but the prime contractor lowered the amount to \$19,000 without telling the State. Interviewee #4 said the State contacted him and asked if he was comfortable working with the prime contractor, but he was no longer working with the prime contractor, although the prime contractor was reporting to the State that Interviewee #4 was still working for him. He said that he reported this to the State, but he said that he does not know what happened. Interviewee #4 also said that by the time the State contacted him, he was working on another project at a different location, and the State questioned him as to why he was not on the original project. Interviewee #4 said that he did not believe the prime contractor took this action because he was a DBE but, rather, the prime contractor realized that it was an easy job, and he could use his own people.

Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that there could be a problem when an agency sets aside part of the contract for a minority vender and requires the prime to put small businesses on their team to meet that requirement, because once the project is won the prime may not give the business to those small businesses. He said that there should be more oversight to ensure that the contractors utilized in the bid are actually used. He stated that he has not heard about this problem occurring specifically with ODOT, but he had heard about it happening with government contracts generally. He added that falsification of good faith efforts probably occurs too.

Interviewee #8, the African American president and owner of a civil and structural engineering firm, said that he has not heard of falsifying good faith efforts occurring lately, but he knows it occurred in the past. He said that he does not know of any false reporting of DBE participation.

Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, said that the company receives a lot of materials via faxes from people who are trying to satisfy the good faith efforts requirement. He commented that most of the time the materials just tell you where to go on the computer, almost like propaganda to fulfill the requirements.

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, said, "There's probably a lot more of that that goes on ... Like I get letters from a construction company all the time saying we're going to bid on this project, would you submit a bid?" but he does not do construction. He continued, "Now, I don't know if they count that as a DBE." He said that he knows from his work with ODOT that companies say that they contacted this many DBEs, and none of them responded. He said, "Well, if I'm one of the 10, I'm not going to respond, so I shouldn't be counted as a good faith effort, but I know that I get those letters, and I know construction companies say, 'Hey, we've made a good faith effort.' Well, sending an engineering firm a request for bids for a construction project ... is not a good faith effort."

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that he believes that false reporting of DBE participation exists. He said that he has personally experienced it, and he believes it to be a problem as it relates to opportunities within ODOT.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that she has heard about false reporting of MBE/WBE/DBE participation or falsifying good faith efforts existing and being a problem for MBE/WBE/DBE firms, but she was not sure whether this related directly to Oklahoma contracts. She stated that she has not had any personal experience in this area and cannot relate it to opportunities with ODOT.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm stated that he is aware of false reporting of MBE/WBE/DBE participation and that it directly relates to opportunities with ODOT.

Interviewee #37, the African American male owner of an engineering firm, stated that he is aware of the false reporting of MBE/WBE/DBE participation or falsifying good faith efforts existing and being a problem for MBE/WBE/DBE firms. He reported that he has been solicited by and submitted to companies that had an ODOT project with a DBE goal. He said that the company still did not utilize his firm yet reported a good faith effort and being unable to meet their DBE goal.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, reported that he is aware of the false reporting of MBE/WBE/DBE participation or falsifying good faith efforts being a problem for MBE/WBE/DBE firms. He stated that one firm contacted him and included his firm's name as the surveyor on a bid they submitted to ODOT, but when the firm was awarded the contract, it used another surveyor and never contacted him or his firm to do the work.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that she is aware of false reporting of MBE/WBE/DBE participation or

falsifying good faith efforts being a problem for MBE/WBE/DBE firms. She reported that the firm has not had any personal experience in this area, but she is a familiar with several companies that are not participating in the program properly.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that they are aware that false reporting of MBE/WBE/DBE participation or falsifying good faith efforts is a problem for MBE/WBE/DBE firms. Interviewee #44 stated that the primes run a paper trail and are not actually making a good faith effort, and he can directly relate false reporting of MBE/WBE/DBE participation and falsifying good faith efforts to work opportunities with ODOT.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that he is aware of false reporting of MBE/WBE/DBE participation or falsifying good faith efforts being a problem for MBE/WBE/DBE firms. He stated that the firm will continue to respond to solicitations and announcements received from prime contractors, but they never get an opportunity to work. He stated that announcements received from the primes are their good faith efforts, but is really not an opportunity to be awarded work. He stated that the announcements received from the primes indicate that they have a project and list the subcontracting opportunities they have available. He stated that the announcements ask that the firm select those work areas the firm is interested in submitting bids and return it to the company. Interviewee #45 stated that no other information is received and the primes never ask for pricing and nothing ever results. He stated that this is what the prime contractors count as their good faith efforts. He stated that the notifications that prime contractors send to small and minority firms are only a formality to exclude small firms and falsify efforts to contact small firms. Interviewee #45 stated that the firm has had personal experience in this area and can indirectly relate the problem to opportunities with ODOT.

Interviewee #47, the Caucasian female president of a WBE-certified trucking company, stated that she is aware of the false reporting of MBE/WBE/DBE participation or falsifying good faith efforts existing and being a problem for MBE/WBE/DBE firms. She reported that firms have used her company to meet DBE goals on projects and then not actually used the firm to perform the work. She stated that she can directly relate false reporting of MBE/WBE/DBE participation or falsifying good faith efforts to work opportunities with ODOT.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that he is aware of the false reporting of MBE/WBE/DBE participation or falsifying good faith efforts being a problem for MBE/WBE/DBE firms. He stated that they have had several contractors use the firm's bid and submit the firm's name to satisfy a DBE goal on a project, and then the prime contractor would not use the firm and would perform all of the work themselves.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, said that he is aware of this primarily on the private side. He said that the process needs to be made more transparent and equitable. He also said that the times allowed to respond need to be standardized.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that he is aware that the false reporting of DBE participation exists and is a problem for firms. He stated he is aware of the problem as it directly relates to opportunities with ODOT, and his clients have had experience with the problem.

Interviewee TA #6, the president of a minority business development agency, stated that he is aware that false reporting of MBE/WBE/DBE participation is a problem for MBE/WBE/DBE firms in the local marketplace and with which his clients have had personal experience. Interviewee TA #6 stated that false reporting MBE/WBE/DBE participation directly relates to opportunities with ODOT.

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that her clients have had personal experience with this area of discrimination and that it relates to opportunities with ODOT.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that he is aware of false reporting of MBE/WBE/DBE participation or falsifying good faith efforts is a problem for MBE/WBE/DBE firms. Interviewee TA #9 stated that he has been told by his clients that the prime contractors report to ODOT that they cannot find DBE firms with the capabilities to perform on the projects and they receive waivers. He stated that he believes that there are firms qualified to do the work but they may not be able to meet other requirements like bonding. He stated that he can directly relate the problem to opportunities with ODOT.

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated she is aware that false reporting of MBE/WBE/DBE participation or falsifying good faith efforts is a problem for MBE/WBE/DBE firms. She stated that she has specific knowledge of the false reporting of MBE/WBE/DBE participation or falsifying of good faith efforts and her client has filed a complaint with ODOT.

Other interviewees reported no awareness of or experience with false reporting of MBE/WBE or DBE participation or falsifying good faith efforts. [Interviewees #: 1, 3, 5, 6, 9, 10, 14, 15, 16, 17, 18, 19, 20, 21, 22, 25, 26, 27, 28, 31, 33, 35, 36, 38, 39, 41, 46, TA #1, TA #2, TA #3]. Interviewee #6, the African American owner of a DBE-certified trucking company, said he believes that the people who run the DBE Program do a good job of making sure that this does not occur. He said that he is not sure whether it still occurs.

Interviewee #33, the Caucasian male president of an engineering firm, stated that he had read about false reporting of MBE/WBE/DBE participation or falsifying of good faith efforts in the newspapers, but he has not had any personal experience in this area and cannot relate it to opportunities with ODOT.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that he is not aware of this occurring, but he does not think that enough inspection is done to ensure that this does not occur. He said that if ODOT inspected good faith efforts more, he believes that use of DBE firms would be higher.

N. Any other related forms of discrimination against minorities or women.

Some interviewees reported knowledge of or experience with other forms of discrimination in the local marketplace. [Interviewees #: 39, 45, TA #5, TA #10]. Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that she is

aware of discrimination against Hispanic individuals because the foremen cannot communicate with laborers who do not speak English.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that the firm has experienced other forms of discrimination. He reported that on one occasion his firm showed up on a project and no other contractors were on the job site that day. He stated that after they showed up to the job site, the highway patrol showed up and told his firm that they (the highway patrol) were instructed to stop all of their trucks. He stated that the highway patrol weighed and inspected all of the trucks. Interviewee #45 stated that he knew it was a suspicious situation because no other contractor or trucking company showed up to the work site that morning. He stated, "We didn't get the memo [that it was a set-up]."

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated, "ODOT has done a pretty good job creating a culture that gives pretty good lip service for accomplishing DBE goals, but, again, their results don't qualify the rhetoric." He stated that a good faith effort is not just creating a website but creating good faith as part of the culture of ODOT. He said ODOT should provide training that will allow people to come in and learn the process step by step, learn what the expectations are, how the projects are funded and the logistics of it. He stated, "If you can get a DBE filling out paperwork, it doesn't really speak to much else. A marginally qualified contractor can become a DBE." He stated that the goal should be to help them accomplish their goals and help companies mature. Interviewee TA #5 stated, "I don't see it [with ODOT], but I do see that model used in other places."

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that one of her clients had an ODOT contract that required the prime to utilize Oklahoma-based companies. She stated that after the subcontractor filed a complaint with ODOT, it was determined that the prime was falsifying contracting information and was not utilizing Oklahoma-based firms. She stated that in the middle of the project, the prime contractor took the work from her client and gave the work to some firms outside of Oklahoma. She stated that the subcontractor lost money because he had secured a loan and supplies to work on the contract.

Other interviewees reported no knowledge of or experience with other forms of discrimination in the local marketplace. [Interviewees #: 1, 2, 3, 4, 5, 6, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 25, 26, 27, 28, 33, 34, 35, 36, 37, 38, 46, 47, 48, TA #1, TA #2, TA #3, TA #9]. Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, said that he thinks that things have improved.

VIII. Neutral Measures.

Interviewees were asked whether they had any experience with or were otherwise generally aware of any race-, ethnicity- or gender-neutral programs or measures to assist small businesses, including minority and female-owned businesses. Interviewees were then asked to provide their impressions with respect to a number of specific race-, ethnic- or gender-neutral programs or measures listed in detail below.

Some interviewees reported a general awareness of certain race, ethnic, or gender-neutral programs or measures to assist small businesses, including minority- and female-owned businesses. [Interviewees #: 3, 6, 7, 25, 26, 27, 29, 32, 33, 34, 35, 36, 38, 39, 40, 41, 42, 43, 44, 45, 48, TA #1, TA #3, TA #5, TA #6, TA #7, TA #8, TA #9, TA #10]. Interviewee #3, the Caucasian male president of a civil engineering firm, said that "I know that ODOT has a staff for DBEs," and "every year we have a partnering meeting [between engineers and ODOT] ... one of the breakout sessions was DBE information," and the "ODOT staff led the break-out and talked about training [and other assistance that is available regarding the DBE Program.]" He said that he was impressed with the session.

Interviewee #6, the African American owner of a DBE-certified trucking company, stated that he is aware that ODOT has a seminar designed to help small businesses connect with DBEs and primes. He added that these seminars would be helpful "if people would come."

Interviewee #7, the Native American owner of a federally-certified aerospace firm, reported that he was aware of efforts by universities and the SBA that are doing workshops. He commented that the workshops are not coordinated, and it would help "if they'd bring more real world experience into those workshops. A lot of times the focus is on the certification process, not on how to get business and perform the business." He stated that this can be misleading because, if it is not discussed properly in the workshops, people think that once they are certified they are automatically going to get business.

Interviewee #25, the Hispanic male owner of a DBE-certified construction firm, said that while he is aware there are programs out there for minority and women-owned firms, he has not made much effort to use them. He stated that he has little or no knowledge about these programs, but "ODOT sends out stuff to help DBEs, like for events, but we can't ever attend. We always plan to but something comes up."

Interviewee #26, a supervising manager of a Caucasian-owned construction firm, reported his only experience with neutral measures includes certification as a small business and a hub zone business. He stated "we hope these might give us some advantage in the future, but at this point we aren't really sure what it all will mean."

Interviewee #27, the Caucasian female owner of a DBE-certified erosion control firm, reported that ODOT has sponsored a DBE breakfast for the purpose of providing a networking opportunity for primes and subcontractors to meet, which she found helpful.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that he is aware of programs and initiatives that exist to help small businesses such as Langston University and OBAN (Oklahoma Business Assistance Network). He stated that he has tried to use some of these programs, but they have not been very helpful.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that she is aware of the SBA as well as others who act as resources to assist small businesses. She reported that she has only gone to the SBA for assistance, and they were helpful.

Interviewee #33, the Caucasian male president of an engineering firm, stated that he is aware that the SBA is a resource to assist small businesses.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm, stated that he is aware of a lot of resources that assist small business but could not provide a list. He stated that assisting small business is helpful because "small business growth helps everyone."

Interviewee #35, the Native American female president of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated that she is aware of potential measures or programs that are particularly helpful for small businesses. She reported that when the ODOT DBE office plans programs or activities, the firm only finds out about the event the day before or the event gets cancelled because of lack of participation. But she said that she believes such programs would be helpful for all businesses.

Interviewee #36, a Caucasian female senior engineer of an engineering firm, stated that she is aware of the DBE requirements under federal and state contracts and believes them to be helpful for small businesses. She stated that particularly on the federal side there is a lot of encouragement for DBE firms and DBE contracting such as Tinker Air Force Base hosting a Small Business Day and the Corps of Engineers constantly having small business information available.

Interviewee #38, the Native American female president of an engineering firm, stated that she is aware of the National Center for American Indian Enterprise Development that provides assistance with marketing, 8(a) certification, and business plan development free of charge. She stated that she is not aware of any other programs that are particularly helpful to small businesses.

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that the City of Tulsa has a minority program called the Bridge Program that has semi-annual marketplace conferences that allow minority business to advertise. She reported that the City of Tulsa Bridge Program is also very active on high profile projects and tries to assist the community and increase MBE participation.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, reported that he was aware that ODOT offered some training on how to read plans and estimating assistance to small businesses. He said that he was aware that OSU offered classes to provide training too, and his wife has taken some computer classes, but they were not very helpful.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that she frequently sees notices about helpful resources, but she cannot recall any sponsors or providers. She noted that she receives information from the Cherokee Nation because she is certified and often recruits workers from the Cherokee Nation and shares the information she receives.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that the services that were provided when Team One Consultants had a consulting contract with the ODOT DBE Program were very good. Interview #43 stated, "Any organization that would help educate and prepare minority businesses to bid, obtain contracts and survive would be a benefit."

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that SBA provides assistance, but they do not believe the assistance is really helping

minorities. They stated that since 1998 they have tried to get assistance from the various programs and have not really received any good assistance from any of them, including ODOT. She stated that the bid assistance that was provided by the Bid Assistance Center at Rose State College was helpful.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that he often hears about programs, seminars and breakfasts but he does not participate because experience has shown him that most of these programs are not helpful.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that the ODOT DBE Office and Rural Enterprises, Inc. were very helpful. He stated that the ODOT DBE staff contacted his firm and encouraged them to become certified.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, said that he was aware of a federal program that will pay 50 percent of a DBE-certified firm's membership fee to participate in the AGC. He said that the AGC then implemented a policy to allow such DBE-certified firms to pay the other half of their membership dues in quarterly installments. He stated that a DBE can then participate in the association for 90 days for free, and the AGC will not invoice them if they decide not to join the association at the end of that time.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, reported that he thinks that the DBE Program "is ineffective." He said that the SBA has a bonding program that is still to some degree credit-driven, and it is not easy, but it is helpful.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that he has direct experience with and is aware of agencies, such as NABEC, Women's Business Center, OBAN, and SBDCs, that are on the frontline helping people understand the process, identifying projects, and getting firms prepared to be "players in the game." He stated, "Oklahoma doesn't lack resources to help, but you have to seek them out and take advantage of them."

Interviewee TA #6, the president of a minority business development agency, stated that he is aware of potential measures or programs that purport to be helpful to small business, but he does not believe them to be effective. He stated, "Locally there is a program called 'BRIDGE' that is a mentoring program that encouraged primes to be shadowed by subs to create the environment of inclusion and opportunity." He stated that the lack of success of the program is based on the attitude that the firms are only participating for appearance's sake.

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated that her center had a Memorandum of Understanding with ODOT that provided guard rail installation training, and that program was helpful. She added that she would like to see more such programs.

Interviewee TA #8, a program coordinator and a special program consultant for a minority trucking cooperative, said that "There used to be lots of programs trying to foster MBE improvements, but over the past 30 years these programs have slowly been dismantled." They stated that the reason

minorities are not getting work with ODOT is because some of the effective programs that were started by ODOT, including the networking breakfasts and the DBE website, were terminated.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that he is aware of potential measures or programs that are particularly helpful to DBE firms. He stated that he is aware of small business development centers (SBDC) that have special programs that provide assistance with federal contracting and assist with ODOT certification. He stated that the OBAN is particularly helpful to small businesses.

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that she is aware of the Technology Centers, Business Development Centers, OBAN and Women's Business Centers, and that these resources are all helpful to small businesses.

Some interviewees indicated that they had no knowledge of any race, ethnic, or gender-neutral programs or measures to assist small businesses, including minority- and female-owned businesses. [Interviewees #: 2, 22, 23, 24, 28, 30, 46, 47, TA #2]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, said that he was not aware any race-, ethnic- or gender-neutral programs because he has not put the time in to look for them, although he is "sure" that such programs exist.

Interviewee #23, the African American male owner of a DBE/SDBE/MBE-certified security, construction, and food service firm, shared that there are no small business or minority assistance programs in the Oklahoma City area. He further stated the he works after-hours to assist small minority businesses in getting started and walking them through the process of how to bid with public agencies and how to get their business.

Interviewees were asked to provide their impressions with respect to the following specific race-, ethnic- and gender-neutral programs or measures, whether they had any experience with these programs, whether they were aware of these programs, and whether they thought that these programs would be helpful.

A. Technical assistance and support services.

Some interviewees reported awareness of technical assistance and support services. [Interviewees #: 2, 4, 6, 8, 10, 14, 29, 30, 33, 35, 47, TA #1, TA #2, TA #3, TA #4, TA #5, TA #6, TA #7, TA #8, TA #9]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, said that he was aware of technical assistance and support services available but had not pursued any such programs. He stated that he personally does not need any help with bidding.

Interviewee #8, the African American president and owner of a civil and structural engineering firm, said that he has heard of private firms offering technical assistance and support services.

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, reported that although he was generally not aware of any technical assistance or support services, he did know that the SBE satellite offices provide such services to all small businesses.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, reported that he is aware of such assistance and provided the SBA's

7(j) program as an example. He reported that he utilized SBA's 7(j) program in his earlier years, along with the Bid Assistance Center's resources and organizations like Tribal Government Institute, which is a private provider that holds a government contract.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, reported that he is aware that there are some programs and initiatives that provide technical assistance and support services. He stated that he is aware that ODOT professes to offer assistance in this area, but that he has been unable to receive any assistance in this area. He stated that he contacted ODOT for assistance only to get the response, "Oh, you're just a one-truck operation," and, therefore, he felt that his firm was not taken seriously. Interviewee #29 stated that ODOT was not responsive to him.

Interviewee #30, the Caucasian male co-owner of a transportation firm, stated that he is aware and has heard of programs and initiatives providing technical assistance to business. He stated that he was not aware of the use of the measure by ODOT.

Interviewee #33, the Caucasian male president of an engineering firm, stated that he had heard of programs and initiatives that provide technical assistance and support service, although he does not have any direct experience with the programs. He added that he is not aware of any use of the measure by ODOT.

Interviewee #35, the Native American female president of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated that she has had direct experience with programs providing technical assistance and support services through the recent DBE conference sponsored by ODOT that provided information on websites for assistance in this area.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, stated, "I am aware of ODOT trying to help DBEs learn to bid." He said that ODOT had an upcoming event to assist DBEs and he expected his contractor members to participate.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that he was aware of Oklahoma Business Development Centers, local colleges, and universities providing this kind of training to a small degree.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, said that he was aware of such assistance. He said that the organization offers such assistance in conjunction with other entities like the Association of General Contractors.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, reported that he has direct experience with and is aware of programs that offer technical assistance and support services for small business. He stated that he is aware that ODOT has provided some very limited assistance initiatives, and he felt that ODOT should be the primary source of assistance for ODOT projects. Interviewee TA #5 stated that he is not aware of anyone providing direct bid assistance or helping companies price their services.

Interviewee TA #6, the president of a minority business development agency, stated that his agency provides direct technical assistance and support services to his clients; however, he said that he is not aware of any use of the measure by ODOT.

Interviewee TA #7, the director of an organization that provides assistance to small businesses, stated she had direct experience with this neutral measure and that she was aware of ODOT's use of such measure.

Interviewee TA #8, a program coordinator and a special program consultant for a minority trucking cooperative, stated that they are aware that each DBE is eligible for up to \$1,000 of technical assistance funding through ODOT.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that there are not a lot of information or programs providing direct technical assistance and support services to MBE firms. Interviewee TA #9 stated that he was aware of assistance from ODOT approximately two years ago when ODOT engaged an outside consultant to provide assistance to the DBE firms.

Some interviewees reported that they were not aware of technical assistance and support services for small businesses. [Interviewees #: 1, 5, 7, 9, 12, 13, 15, 18, 19, 20, 21, 26, 28, 31, 32, 34, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48, TA #10]. Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that he has not had any direct experience with programs that provide technical assistance and support services other than courses available at universities and colleges. He said that he is not aware of ODOT providing this assistance.

Some interviewees thought that the provision of technical assistance and support services could be beneficial to small businesses. [Interviewees #: 1, 4, 5, 6, 7, 8, 9, 12, 15, 20, 21, 27, 28, 29, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 47, 48, TA #1, TA #2, TA #3, TA #4, TA #5, TA #6, TA #7, TA #9, TA #10]. Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, said that he believed that these programs would be beneficial to small businesses, although he had not personally participated in any.

Interviewee #8, the African American president and owner of a civil and structural engineering firm, said that it would be helpful to small businesses if ODOT would offer such services. He stated that most small contractors do not have the expertise to manage the systems and apply, "so some training" would be helpful.

Interviewee #9, the African American owner of a non-certified trucking company, said that it would be particularly helpful if someone would teach people how to bid.

Interviewee #15, the Caucasian male co-owner and manager of an engineering firm, said that he "doesn't want somebody to do any of my work for me, but if there's a place I can go to say 'How do I properly fill this out?'" that would be very helpful.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that he believes the technical assistance and support services are desperately needed by MBE firms.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated that she thinks that any kind of assistance for small businesses "would be awesome."

Interviewee #38, the Native American female president of an engineering firm, stated that she has not had any direct experience with programs that provide technical assistance and support services. Interviewee #38 stated that she is not aware of any use of the measure by ODOT but believes it would be helpful for small businesses include MBE/WBE/DBES. She stated that if you make assistance readily accessible for businesses to grow and run more efficiently, it would be very helpful for small businesses.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that he thinks that such programs are very valuable because "a lot of small businesses fail because they are not prepared," and one of the areas in which training is most needed is accounting.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, said that it would be helpful if ODOT had that kind of program because developing the bid is a major issue, and it would really help if ODOT would provide "technical training and assistance" and allow businesses to partner with an established entity to go through the process.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that he believes that it would be helpful for ODOT to provide such assistance.

Some interviewees indicated that the provision of technical assistance would not be beneficial. [Interviewees #: 13, 16, 17, 33]. Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, said that his company has "in-house capability," so they "didn't seek [that]."

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that he would not want ODOT helping him bid. He said that ODOT does not know his business, and he would like to keep it that way.

B. On-the-job training programs.

Some interviewees reported awareness of on-the-job training programs available to small businesses. [Interviewees #: 4, 11, 13, 14, 15, 16, 17, 19, 31, 35, 36, 39, TA #2, TA #4, TA #5]. Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, reported that he has heard of on-the-job training programs, though he has not participated in any such programs.

Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, reported that she was offered an on-the-job-training program. He said that the offeror wanted him to be a part of a rehabilitation program.

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, said that he knows that ODOT has offered on-the-job programs in the past.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, reported that he is familiar with on-the-job training programs. He said that Oklahoma has a tremendous vocational technology presence, and he has been very pleased and impressed with its ability to train skilled workers.

Interviewee #15, the Caucasian male co-owner and manager of an engineering firm, noted that he got licensed as a professional engineer through an on-the-job training program.

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, said that they "go to the professional seminars, but that's about it ... and whenever there is a new ... technique," they send people to take part in training.

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, said that he was not aware of any on-the-job training programs provided by ODOT. He stated that he has participated in some such programs with the AGC about five or six years ago to "assist you in training some of your people," and he found those programs helpful.

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned bridge design engineering firm, said that he was aware of an on-the-job-program for bridge inspection.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, reported that she has heard of on-the-job training programs, but she has not had any direct experience with on-the-job training programs. She stated that she is not aware of ODOT providing any on-the-job training programs.

Interviewee #35, the Caucasian vice president of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated that she has had direct experience with programs providing assistance with on-the-job training through the AGC that reimbursed a portion of payroll dollars spent on trainees. She stated that she is aware that in the past ODOT assisted in the on-the-job training program sponsored by the AGC, but is not aware of any use of the measure by ODOT currently.

Interviewee #36, a Caucasian female senior engineer of an engineering firm, stated that, other than internships, she has not had any direct experience with on-the-job training programs. Interviewee #36 stated that ODOT has a good internship program.

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, reported that the firm has on-the-job training and an apprenticeship programs to train skill laborers. She stated that tribal projects require an apprenticeship program on many of their projects. Interviewee #39 stated that she is not aware of any use of the measure by ODOT.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, said that the Association of General Contractors does provide some special on-the-job training programs. He also said that some "technology centers partner with different entities" and "young people will participate in ... an internship or on-the-job training program that will evolve to an actual permanent job."

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that he has direct experience with and is aware of other programs that currently provide on-the-job training, such as SCORE and NABEC. He stated he is not aware of ODOT providing these services, but he believes that it would be helpful and make ODOT credible. He stated, "Providing such services would require ODOT to change their culture to have an emphasis on helping small businesses, with DBEs being a subsection of small businesses, to bring them along as better-qualified contractors."

Other interviewees reported that they were not aware of any on-the-job training programs available to small businesses. [Interviewees #: 1, 2, 3, 5, 6, 8, 9, 10, 18, 20, 21, 26, 28, 29, 32, 33, 34, 37, 38, 40, 41, 42, 43, 44, 45, 46, 47, 48, TA #1, TA #3, TA #6, TA #7, TA #9, TA #10]. Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that he has not had any direct experience with on-the-job training programs. He added that he is aware that ODOT has set up some GPS training and that ODOT had manufacturer's representatives available to demonstrate new equipment.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that he is aware of trade-school training, but he is "not aware of any of the large contractors [having] apprentice programs or anything like that."

Interviewee TA #6, the president of a minority business development agency, stated that his clients have not had direct experience with an on-the-job-training program, and he is not aware of any use of the measure by ODOT.

Some interviewees thought that on-the-job training programs could be beneficial to small businesses. [Interviewees #: 1, 2, 4, 5, 7, 8, 12, 14, 15, 17, 18, 19, 20, 21, 27, 28, 29, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, TA #1, TA #2, TA #3, TA #4, TA #5, TA #6, TA #7, TA #9, TA #10]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, stated that he believed that on-the-job training programs would be helpful because such programs would complement his personal goal of bringing in and training more DBEs.

Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that this would be helpful because a lot of companies "really don't understand the system."

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that he has participated in some of these programs with the AGC about five or six years ago, to "assist you in training some of your people," and he found those programs helpful.

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned bridge design engineering firm, said that it would be useful to have some other kinds of programs and training.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, said that on-the job-training programs would be helpful.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that he believes such assistance would be helpful for small businesses. He

stated he is not aware of ODOT providing these services, but he believes it would be helpful and make ODOT credible. He stated, "Providing such services would require ODOT to change their culture to have an emphasis on helping small businesses, with DBEs being a subsection of small businesses, to bring them along as better-qualified contractors."

Other interviewees reported that they did not think that on-the-job training programs would be beneficial to small businesses. [Interviewees #: 9, 13, 23, 33]. Interviewee #9, the African American owner of a non-certified trucking company, said that if you are getting contracts, you should already know how to do the work. He indicated that this would not be helpful for the trucking industry.

Interviewee #23, the African American male owner of a DBE/SDBE/MBE-certified security, construction, and food service firm, stated that training programs for small businesses do not address the real issues of obtaining work, so they are not helpful in making small businesses successful.

C. Mentor/protégé relationships.

Some interviewees reported that they were aware of mentor programs available to small businesses. [Interviewees #: 7, 13, 14, 18, 19, 27, 29, 35, 36, 37, 38, 42, TA #1, TA #4, TA #6, TA #10]. Interviewee #7, the Native American owner of a federally-certified aerospace firm, reported that he is in a mentoring relationship with an 8(a) certified African American-owned company in Washington, D.C. He said that he did not know if this program was set up at the state level.

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, said that he has heard of mentor-protégé relationships, but he does not know if ODOT offers them.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, reported that the federal government encourages mentor-protégé relationships, though he is unsure if ODOT has such a program. He said that this federal program allows him to learn from other contractors who do more business each year. He reported that he is not a formal mentor. He stated that there is a DOD and an SBA formal mentor-protégé program and a certification procedure that allows you to participate in that program. He said that he has done that with SBA as a protégé and that he is now performing the role as a mentor for some others.

Interviewee #18, the Caucasian male treasurer of a Caucasian male-owned heavy paving and grading construction firm, said that there had been such programs in the past but he was unfamiliar with the current status.

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned bridge design engineering firm, said that he was familiar with an "Engineer-in-Training" program, but he was not aware of any programs provided by ODOT.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that he is aware that the Small Business Administration has a program providing mentor-protégé relationships. He stated that he is not aware of any use of the measure by ODOT.

Interviewee #37, the African American male owner of an engineering firm, stated that he is aware of mentor-protégé relationships but does not think they are implemented. He stated that he is not aware of any use of mentor-protégé relationships by ODOT.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that she personally provides help to individuals with certifications and other paperwork, and she is aware of the Small Business Administration providing assistance in this area. She said that she is not aware of any use of mentor-protégé relationships by ODOT.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, said, "We are developing new programs every year based on the need," and he added that he thought that he may have heard of mentor-protégé relationships in his discussions with ODOT.

Interviewee TA #6, the president of a minority business development agency, stated that his clients have not had direct experience with the mentor-protégé relationships. He stated that he is aware of one such program, called the Bridge Program, with the City of Tulsa.

Some interviewees reported that they were not aware of stat- level mentoring programs available to small businesses. [Interviewees #: 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 16, 17, 20, 21, 26, 28, 30, 31, 32, 33, 34, 39, 40, 41, 43, 44, 45, 46, 47, 48, TA #2, TA #3, TA #5, TA #7, TA #8, TA #9]. Interviewee #3, the Caucasian male president of a civil engineering firm, described an experience that involved mentoring, although not an official mentor-protégé program. He said that there was a large job within the past year that required 8 percent DBE participation. He said that he went in with a team, including DBE firms, and gave them a lot of autonomy coupled with training. He said, "ODOT was very impressed, [and] that's why we won the job."

Interviewee #8, the African American president and owner of a civil and structural engineering firm, said that he is not aware of a formal program from ODOT, but he has been an apprentice.

Interviewee #41, the Hispanic male owner of a DBE-certified trucking firm, stated that he has not had direct experience with programs providing assistance in mentor-protégé relationships, but he personally provides help to individuals with information regarding certifications and other paperwork. He added that he is not aware of any use of mentor-protégé relationships by ODOT.

Some interviewees thought that mentor programs could be beneficial to small businesses. [Interviewees #: 2, 5, 6, 7, 8, 9, 11, 14, 15, 16, 20, 21, 28, 29, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, TA #1, TA #2, TA #3, TA #4, TA #5, TA #6, TA #7, TA #9, TA #10]. Interviewee #6, the African American owner of a DBE-certified trucking company, said that he thought that this could be helpful, but he would not want someone "following [him] around and being a mentor." He noted, "This is my livelihood, and if I figure out a secret to getting a job done or ... a better way of doing something, I'm not too sure I want to share with everybody.... That's [kind of] my advantage."

Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that he is "a firm believer in mentor-protégé programs." He reported that he is in a mentoring relationship with an 8(a) certified African American-owned company in Washington, D.C. He said that they have found that they can work together to provide each other assistance, and it is a very good vehicle when it is set up correctly.

Interviewee #8, the African American president and owner of a civil and structural engineering firm, said, "There's nothing wrong with bringing people on to get them started in a technical field." He said that such a program from ODOT could be very beneficial.

Interviewee #9, the African American owner of a non-certified trucking company, said that a lady at Langston University kind of does this, but it would probably be helpful to have a formal program.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, suggested that ODOT create a mentor-protégé program. He said that through the mentor-protégé relationship, he gets to learn and build project management systems with someone who is more experienced. He said that this is one of the wise things that the federal DOD and the SBA do.

Interviewee #15, the Caucasian male co-owner and manager of an engineering firm, commented that he is "leery" of mentor-protégé relationships. He said that it is either his seal or someone else's, and it is either his design or someone else's. He said that he would welcome the opportunity to have a relationship that would put him in contact with more work opportunities.

Interviewee #30, the Caucasian male co-owner of a transportation firm, stated that he believes mentor-protégé relationship programs would not be helpful to his company, but he believes it would be helpful for other small and start-up businesses.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, said that his experience with these relationships has been very good. He said, "The problem is [that] there are too few, especially when you get into the more highly-complex parts of the operation" in which more skilled mentorship is needed. He said that he thinks that these relationships would be an excellent way "to help close that gap with some of the companies that are ... missing a little expertise that they need [to be successful]."

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that mentor-protégé relationships are a good established model and that there are plenty of multi-state regional contractors that could easily engage in similar projects. He stated that he believes mentor-protégé relationships would be helpful for small businesses.

Other interviewees did not think that mentor programs could be beneficial to small businesses. [Interviewees #: 4, 33]. Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, said that if the mentor is a prime contractor, he did not believe that such a mentor would want to assist someone starting in the field.

D. Joint venture relationships.

Some interviewees reported that they were aware of joint venture relationships available to small businesses. [Interviewees #: 1, 3, 4, 6, 7, 11, 13, 16, 17, 32, 33, 34, 35, 36, 37, 38, 40, 42, TA #10]. Interviewee #1, the Caucasian male chief financial officer of a Caucasian male-owned heavy highway and bridge construction firm, stated that he was aware of multiple joint venture relationships, but he did not know whether these were between DBE and non-DBE firms.

Interviewee #3, the Caucasian male president of a civil engineering firm, stated that he has participated in a joint venture relationship to go after a project. He said that usually when his firm joint ventures, it is with another large company because they are going after a very large project.

Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that he had heard of joint venture programs, although not ones offered through ODOT.

Interviewee #6, the African American owner of a DBE-certified trucking company, said that he engages in joint venture relationships "all the time."

Interviewee #7, the Native American owner of a federally-certified aerospace firm, reported that in the government context, "joint ventures can only be for one contract at a time." He said that this fact makes it more difficult to finance each separate joint venture. He added that he has not heard of ODOT doing this.

Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, said that he was aware of joint ventures, but he has never been involved in one.

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, said that he knows that ODOT permits joint ventures, but he has not yet participated.

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, reported that he has participated in joint ventures, and that experience was "good." He said that that experience occurred during a ODOT project, and he would be interested in doing more of those.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that although she does not have direct experience with joint ventures, she had heard of such relationships existing. She stated that she is not aware of the use of joint venture measures by ODOT.

Interviewee #33, the Caucasian male president of an engineering firm, stated that he has had direct experience with joint venture relationships because he has utilized joint venture relationships previously with other engineering firms. He said that he is not aware of any use of the measure by ODOT.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm, stated that he has had direct experience with joint venture relationships. He stated that his firm has participated in joint venture relationships in the past.

Interviewee #36, a Caucasian female senior engineer of an engineering firm stated that typically her firm puts together joint venture relationships on their own and therefore she has had direct experience with joint venture relationships. She stated that she is not aware of any use of the measure by ODOT.

Interviewee #38, the Native American female president of an engineering firm stated that she has had direct experience with joint venture relationships because if you are a small company participating in joint ventures, it allows the small company to gain valuable experience. She reported that she has established some joint ventures for bidding projects herself by contacting and teaming with other firms. She stated that she is not aware of the use of joint ventures by ODOT, and although ODOT and other state agencies talk about it, they do not do anything to facilitate it.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that she has not had direct experience with programs providing assistance with joint venture relationships, but she reported that when her firm first began operations, it participated in a joint venture. She added that she is not aware of the use of joint venture relationships by ODOT.

Other interviewees reported that they were not aware of joint venture relationships available to small businesses. [Interviewees #: 2, 5, 8, 9, 12, 18, 19, 20, 21, 26, 28, 29, 30, 31, 39, 41, 43, 44, 45, 46, 47, 48, TA #1, TA #2, TA #3, TA #5, TA #6, TA #7, TA #9]. Interviewee #12, the owner of a female-owned non-certified civil engineering and land surveying firm, said that the company has never done any joint ventures because "we've always enjoyed, up until the past year, as much business as we could handle."

Some interviewees thought that joint venture programs could be beneficial to small businesses. [Interviewees #: 4, 5, 6, 7, 8, 9, 13, 15, 16, 20, 21, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 38, 39, 41, 42, 43, 44, 45, 46, 47, 48, TA #1, TA #2, TA #3, TA #4, TA #6, TA #7, TA #9, TA #10]. Interviewee #6, the African American owner of a DBE-certified trucking company, said that he thinks that these are very helpful because he often needs help when he works on bigger jobs.

Interviewee #15, the Caucasian male co-owner and manager of an engineering firm, commented that joint venture relationships "would have to be well thought out.... I can see the possibility of that. I haven't done it in the past, but I can see how that would work, but it would have to be a very structured agreement to say the least."

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, commented that the benefits of taking part in a joint venture include "bigger staff and bigger capabilities than ours ... with many offices and all sorts of in-house expertise ... and they had more exposure" than his company did concerning that kind of project.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm, stated that he is aware of the use of joint venture measures by ODOT and thinks it helpful for small businesses including MBE/WBE/DBEs.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that such

relationships would be very helpful, but he is not sure that it would ever really work because people do not want to create their own competition.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, said that he thinks that these relationships are "what's missing in Oklahoma big time, and if we had that, I think that would solve all the problems because you get capitalization, you get expertise, you get someone to help provide leadership and direction.... That's why I don't understand why there's not more of that."

One interviewee did not think joint venture programs could benefit small businesses. [Interviewee #: 40]. Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, commented that he does not think that joint venture relationships are particularly good because there are always questions regarding equitable distribution of liability and profits.

E. Financing assistance.

Some interviewees reported that they were aware of financing assistance. [Interviewees #: 1, 9, 13,14, 29, 38, 39, 41, TA #2, TA #3, TA #5, TA #8, TA #9]. Interviewee #1, the Caucasian male chief financial officer of a Caucasian male-owned heavy highway and bridge construction firm, stated that he believed that the SBA provided some sort of program involving financing assistance for small businesses.

Interviewee #9, the African American owner of a non-certified trucking company, said that he thinks Langston University offers programs like this.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, said that he was aware of financing assistance and provided the following examples: SBA Bond and Guarantee Program, Bureau of Indian Affairs Loan Guarantee Program, DOT short-term lending program, and the Consortium (one that's a part of the National Minority Development Council).

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that he is aware that the SBA provided financing assistance for small businesses. He reported that he is not aware of any use of the measure by ODOT.

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that she has not had any direct experience with programs that provide financing assistance, but that she believes the City of Tulsa provides assistance with financing.

Interviewee #41, the Hispanic male owner of a DBE-certified trucking firm, stated that he has not had any direct experience with programs that provide financing assistance. He added that he attended the ODOT annual conference, but much of the financing assistance information provided was over his head. He said that he could still understand how the information would be useful for his firm, though.

Interviewee TA #2, the executive director of a Hispanic trade association, said that he thinks that ODOT provides some amount of financing assistance.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that he does not have direct experience with and is not aware of ODOT providing financing assistance; however, he said that he does know that the Cherokee Nation has a loan program for Native Americans. He stated that there are CDCs in the United States, whose prime focus is minority business, and the CDCs in Oklahoma, such as the Tulsa Economic Development Corporation that target minority business, but he noted that their geographic scope is somewhat limited.

Some interviewees reported that they were not aware of the availability of financing assistance. [Interviewees #: 3, 4, 5, 6, 7, 8, 10, 12, 17, 18, 19, 20, 21, 26, 28, 30, 31, 32, 33, 34, 35, 36, 37, 40, 42, 43, 44, 46, 47, 48, TA #1, TA #6, TA #7, TA #10]. Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that he is not aware of ODOT providing this service.

Some interviewees thought that the provision of financing assistance could be beneficial to small businesses. [Interviewees #: 4, 5, 6, 7, 8, 9, 11, 14, 15, 20, 21, 27, 28, 29, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 46, 47, 48, TA #1, TA #2, TA #4, TA #6, TA #7, TA #9, TA #10]. Interviewee #8, the African American president and owner of a civil and structural engineering firm, said that it "would be helpful to a lot of people," but he does not know if it would be allowed.

Interviewee #9, the African American owner of a non-certified trucking company, said that this assistance would "most definitely be helpful."

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, said that he thinks financing assistance would be helpful for small businesses, including MBE/WBE/DBEs, but he stated that he doesn't think ODOT should be providing any such assistance.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that he is not aware of any use of the measure by ODOT but thinks initiatives providing financing assistance would be "tremendously" helpful for small businesses, including MBE/WBE/DBEs.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, said that after meeting with financial institutions, he understands that there are legitimate reasons that these institutions use the criteria that they use to make their decisions. He added, though, "that criteria ... hurts minority organizations because they're always going to be the newest and the most undercapitalized." He said that the government should "augment what financial institutions are able to do."

Other interviewees did not think that the provision of financing assistance was necessary or beneficial. [Interviewees #: 13, 17, 33]. Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, said that the State bought him a set of books as a part of the DBE projects, and that was helpful, but he said that he is not interested in more general financing assistance.

Interviewee #33, the Caucasian male president of an engineering firm, stated that he thinks that loan guarantees are wrong.

F. Bonding assistance.

Some interviewees reported awareness of bonding assistance. [Interviewees #: 14, 29, 39, 41, 42, TA #1, TA #5, TA #8]. Interviewee #29, the African American male owner/operator of a DBE-certified trucking firm, stated that he just recently became aware of ODOT offering a bond assistance program through the ODOT newsletter.

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that that she has not had any direct experience with programs that provide bonding assistance, but she believes the City of Tulsa provides assistance with bonding.

Interviewee #41, the Hispanic male owner of a DBE-certified trucking firm, said that ODOT provided bonding information at the recent DBE conference, but he could not understand how the information would be useful for his firm.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that Cherokee Nation has information about bonding assistance available to DBE firms. She reported that she was not aware of the use of the measure by ODOT.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, said, "I have heard that the federal government does [provide bonding assistance]."

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that he has direct experience with and is aware of bonding assistance programs and initiatives, such as those offered by the SBA Bond Guarantee Program. He said that although they are not well-promoted, they do exist. He stated that he did not know of anyone taking advantage of the program, minority or majority, because "I don't believe [the SBA] really wants to do it." He stated that he is not aware of ODOT providing any bonding assistance. He stated that most bonding assistance comes from contractors, not agencies, because contractors know that bonding is an area of weakness for subcontractors. Interviewee TA #5 stated that prime contractors have been forced into creating internal programs that allow them to qualify a contractor that may not necessarily have enough bonding capacity but is nonetheless well-qualified.

Some interviewees reported that they were not aware of bonding assistance. [Interviewees #: 2, 3, 4, 6, 7, 8, 9, 10, 12, 13, 20, 21, 26, 28, 30, 31, 32, 33, 34, 35, 36, 37, 38, 40, 43, 44, 45, 46, 47, 48, TA #2, TA #3, TA #6, TA #7, TA #9, TA #10].

Some interviewees thought that provision of bonding assistance could be beneficial to small businesses. [Interviewees #: 2, 4, 7, 8, 9, 13, 14, 15, 20, 21, 27, 28, 29, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, TA #1, TA #2, TA #3, TA #5, TA #6, TA #7, TA #9, TA #10]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, stated that it would help if ODOT could simplify the bonding procedures.

Interviewee #8, the African American president and owner of a civil and structural engineering firm, said that this would be helpful to minority contractors because most of them "do not have enough time in or experience ... where they can readily go to a bonding company and get bonding."

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated she believes bonding assistance would be helpful for small businesses, including MBE/WBE/DBEs, "if it was done the right way."

Interviewee #37, the African American male owner of an engineering firm, stated that he has not had any direct experience with bonding assistance. He stated that he is not aware of any use of the measure by ODOT but believes it would be "tremendously" helpful for small businesses, including MBE/WBE/DBEs.

Interviewee #38, the Native American female president of an engineering firm stated that she believes bonding assistance would be helpful for small businesses, including MBE/WBE/DBEs. Interviewee #38 stated that bonding is probably the biggest issue across the country right now. She said because of new regulations required by the federal stimulus money that came to states, a lot of the "shovel-ready" projects did not get down to the smaller firms because of the bonding requirements.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that he is not aware of the use of the measure by ODOT, but believes bonding assistance would be "tremendously" helpful for small businesses, including MBE/WBE/DBEs. He stated that bonding is a big barrier for small businesses.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that he is not aware of ODOT providing any bonding assistance, but he believes that bonding assistance programs would be helpful, though the mechanics may be too difficult.

Other interviewees did not think that the provision of bonding assistance was necessary or beneficial. [Interviewees #: 6, 17, 33]. Interviewee #6, the African American owner of a DBE-certified trucking company, commented that he does not think "that they should reduce the requirements of the bonding ... because ... the requirements should be high."

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, said that he would be "against" ODOT providing bonding assistance. He stated that "if you don't have any capital, you probably can not get any bonding. If you start giving people bonding that don't have any capital, you can run into all kinds of problems."

Interviewee #33, the Caucasian male president of an engineering firm, said that "if they can't conduct business, they shouldn't be in business."

G. Assistance in obtaining business insurance.

Some interviewees reported awareness of assistance in obtaining business insurance. [Interviewees #: 3, 4, 7, 14, 18]. Interviewee #3, the Caucasian male president of a civil engineering firm, said that the State offers health insurance assistance programs for small businesses and other similar programs.

Interviewee #18, the Caucasian male treasurer of a Caucasian male-owned heavy paving and grading construction firm, said that his company participates in programs about insurance twice a year.

Other interviewees reported that they were not aware of assistance in obtaining business insurance. [Interviewees #: 2, 5, 6, 7, 8, 9, 10, 11, 12, 20, 21, 26, 28, 29, 30, 31, 33, 34, 35, 36, 37, 38, 40, 41, 45, 46, 47, 48, TA #1, TA #2, TA #3, TA #5, TA #6, TA #7, TA #9, TA #10]. Interviewee TA #6, the president of a minority business development agency, stated that his clients have not had direct experience with programs providing assistance in obtaining business insurance and that he is not aware of any use of the measure by ODOT.

Some interviewees thought that the provision of assistance to obtain business insurance could be beneficial to small businesses. [Interviewees #: 2, 4, 5, 7, 8, 9, 14, 15, 20, 21, 27, 28, 29, 30, 31, 34, 35, 36, 37, 38, 40, 41, 45, 46, 47, 48, TA #1, TA #2, TA #5, TA #6, TA #7, TA #9, TA #10]. Interviewee #9, the African American owner of a non-certified trucking company, said that this would be helpful because paying for insurance is a problem.

Interviewee #15, the Caucasian male co-owner and manager of an engineering firm, reported that he is "always open-minded" concerning assistance with insurance. He commented that he pays for his employee's insurance, so "it would be nice if there was another form of ... assistance, I would ... check it out."

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that he believes that assistance in obtaining business insurance would be helpful to educate DBE companies about shopping for insurance.

Other interviewees thought that the provision of assistance to obtain business insurance would not be beneficial to small businesses. [Interviewees #: 6, 17, 33, TA #3]. Interviewee #6, the African American owner of a DBE-certified trucking company, reported that some insurance companies want to be at an upcoming seminar, and he thinks that that is sufficient to expose people to the information. He added that he thinks that ODOT is doing enough to put the information out there so that people can access it.

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, said that his firm does not need assistance to obtain business insurance.

Interviewee #33, the Caucasian male president of an engineering firm, stated that he has not had any direct experience with assistance in obtaining business insurance and that he does not believe the assistance should be needed.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that insurance is expensive, but he has never known obtaining business insurance to be a problem.

H. Assistance in using emerging technology.

Some interviewees were aware of the provision of assistance in using emerging technology. [Interviewees #: 3, 4, 6, 11, 14, 17, 27, 28, 29, 32, 33, 34, 35, 42, 46, 48, TA #4, TA #5, TA #8]. Interviewee #3, the Caucasian male president of a civil engineering firm, said that ODOT provides assistance in using emerging technology "intrinsically."

Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, reported that she attended a training for ODOT electronic bidding and for ODOT's programs and lettings.

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that ODOT provides assistance in using emerging technology, and that it "is a good thing."

Interviewee #28, the Native American female president of a trucking and excavating firm, stated that she has had direct experience with programs providing assistance in using emerging technology. She stated that she is aware of ODOT providing assistance in using emerging technology.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that he is aware of technology assistance program and initiatives being available from programs offered through OBAN, but he said that he is not aware of ODOT providing this assistance.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that she does have direct experience with programs providing assistance in using emerging technology. She also said that she is aware of the use of the measure by be ODOT.

Interviewee #33, the Caucasian male president of an engineering firm, stated that he has had direct experience with assistance in using emerging technology. He said that he is not aware of any use of the measure by ODOT.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm, stated that he has had direct experience with programs providing assistance in using emerging technology.

Interviewee #35, the Native American female president of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated that she is aware that ODOT provides assistance using their website if you contact them.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that she recalls hearing information regarding assistance with technology being provided by ODOT.

Interviewee #46, the African American male owner of a DBE-certified safety and environmental consulting firm, stated that he has had direct experience with programs providing assistance in using emerging technology. Interviewee #46 stated that he is aware that ODOT provided such assistance.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that he is aware that ODOT will provide assistance with electronic bidding.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, reported that ODOT "has done an excellent job in trying to assist" entities with online bidding. He added that the State of Oklahoma is also helping through its construction

management program. He said that the biggest problem is the organization's members and the investment in the technology needed to be able to electronically bid. He said that the government is doing a good job with training, assistance, and transition.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that he does have direct experience with and is aware of technology assistance programs and initiatives being available from programs offered through Career Tech, SBDC and NABEC, but he is not aware of ODOT offering these services.

Interviewee TA #8, a program coordinator and a special program consultant for a minority trucking cooperative, stated that they are aware that OBAN offers technology education and funding.

Other interviewees reported that they were not aware of the provision of assistance in using emerging technology. [Interviewees #: 1, 2, 5, 7, 8, 9, 10, 18, 19, 20, 21, 26, 30, 31, 36, 37, 38, 39, 40, 41, 43, 44, 45, 47, TA #1, TA #2, TA #3, TA #6, TA #7, TA #9, TA #10]. Interviewee #1, the Caucasian male chief financial officer of a Caucasian male-owned heavy highway and bridge construction firm, reported that he was not aware of ODOT providing assistance in using emerging technology, but he noted that he has had to learn the system.

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned bridge design engineering firm, said that he is aware of an ODOT program that allows people to bid for jobs electronically, but he is unsure of whether there is a program that teaches people how to use the technology.

Some interviewees thought that the provision of assistance in using emerging technology could be beneficial to small businesses. [Interviewees #: 2, 4, 5, 7, 8, 9, 12, 13, 17, 20, 21, 28, 29, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 47, 48, TA #1, TA #2, TA #3, TA #4, TA #5, TA #6, TA #7, TA #9, TA #10]. Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, said that he thought that electronic bidding would be very beneficial to his business, although he had not personally participated in any training programs to utilize this technology.

Interviewee #8, the African American president and owner of a civil and structural engineering firm, said that he is sure it would be helpful. He said that "most small businesses, especially in the construction area," use computer programs, and some training on these programs "could be quite beneficial to them."

Interviewee #12, the owner of a female-owned non-certified civil engineering and land surveying firm, said that assistance using emerging technology would be helpful. He said that he is somewhat familiar with online bidding procedures and online opportunities. He stated, "Recently, I've started looking into that and looking ... into online opportunities," so additional training in those areas would be helpful.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that "finding information on the ODOT website is not easy."

Other interviewees did not think that the provision of assistance in using emerging technology would be necessary or beneficial. [Interviewees #: 6, 15, 33]. Interviewee #6, the

African American owner of a DBE-certified trucking company, said that electronic bidding is primarily necessary for the primes, and usually what he does as a subcontractor is done in writing.

Interviewee #15, the Caucasian male co-owner and manager of an engineering firm, commented that he has some reservations about the security of the Internet. He said, "If they could give me a guarantee that [the electronic bidding process] is hackproof, it would be different, but no one can guarantee that." He added that he is also not comfortable submitting confidential information electronically to respond to an RFP, adding, "I'd rather drop it in the mail." He said that he knows the data is out there, though, even if he is not the person who inputs it into the computer.

Interviewee #33, the Caucasian male president of an engineering firm, said that he does not think the assistance would be helpful for small businesses including MBE/WBE/DBEs. He added, "[Small businesses, including MBE/WBE/DBEs] need to get up to speed themselves."

I. Other small business start-up assistance.

Some interviewees reported that they were aware of start-up assistance for small businesses. [Interviewees #: 3, 7, 10, 18, 27, 29, 32, 35, 38, 40, 42, 46, 48, TA #2, TA #4, TA #5, TA #6, TA #8, TA #9, TA #10]. Interviewee #3, the Caucasian male president of a civil engineering firm, stated that he was not aware of ODOT providing small business start-up assistance other than providing advice and guidance to small businesses.

Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that he believes that ODOT provided this kind of seminar a couple of years ago, and that it was "pretty good."

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, reported, said that although he was generally not aware of start-up assistance, the SBA office did provide some.

Interviewee #18, the Caucasian male treasurer of a Caucasian male-owned heavy paving and grading construction firm, said his firm assists in estimating training.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that he is aware of start-up assistance being available through government agencies such as the SBA, but he reported that he is not aware of ODOT offering the assistance.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that she has direct experience with other small business start-up assistance, but that she is not aware of any use of the measure by ODOT.

Interviewee #38, the Native American female president of an engineering firm, stated that she has not had any direct experience with other business start-up assistance, but is aware of agencies such as Rural Enterprises, Inc. (REI) that provide assistance in this area. She stated that she is not aware of any use of the measure by ODOT.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that he has not had any direct experience with programs providing other business start-

up assistance. He said that the Land Surveyor's Society has tried to provide assistance in this area. He added that he is not aware of any use of the measure by ODOT.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, said that she has had direct experience with programs providing other business start-up assistance through the Cherokee Nation and Langston University. She added that she is not aware of any use of the measure by ODOT.

Interviewee #46, the African American male owner of a DBE-certified safety and environmental consulting firm, stated that he has had direct experience with programs providing other business start-up assistance, such as SBA and SCORE, but that he is not aware of any use of the measure by ODOT.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that he has had direct experience with programs or initiatives providing other business small business start-up assistance. He stated that REI and ODOT provide a lot of assistance.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, reported that his organization provides a lot of start-up assistance along with the SBA and the DBE Program. He added, "there's lots of assistance out there if anybody needs it.... Also, they do a very good job ... in making people aware, so if you need assistance, it's not because you don't know where to go."

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that he has direct experience with and is aware of start-up assistance being available, but he is not aware of ODOT offering the assistance.

Interviewee TA #6, the president of a minority business development agency, stated that his clients have had direct experience with other small business start-up assistance, but he said that he is not aware of any use of the measure by ODOT.

Interviewee TA #8, a program coordinator and a special program consultant for a minority trucking cooperative, stated that they are aware that Career Tech System Centers across the State offer assistance to Oklahoma businesses. Interviewee TA #8 stated that they are aware that the Hispanic Chamber of Oklahoma City offers an incubator program.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that he is aware that the SBA and Small Business Development Centers provide information and some assistance on developing business plans. He stated that he is aware of some limited programs that provide advisory information and counseling regarding small business start-ups. He stated that he is not aware of any use of the measure by ODOT.

Other interviewees reported that they were not aware of start-up assistance for small businesses. [Interviewees #: 1, 2, 4, 5, 6, 8, 9, 11, 13, 17, 19, 20, 21, 26, 28, 30, 31, 33, 34, 36, 37, 39, 41, 43, 44, 45, 47, TA #1, TA #3, TA #7].

Some interviewees thought that the provision of other small business start-up assistance could be beneficial to small businesses. [Interviewees #: 2, 4, 5, 6, 7, 8, 9, 13, 17, 20, 21, 28, 29, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, TA #1, TA #2, TA #3, TA #4, TA #6, TA #7, TA #9, TA #10]. Interviewee #8, the African American president and owner of a civil and structural engineering firm, said "of course" this would be helpful, but this may be getting "too far out there." He said, "I wouldn't want the State to do everything."

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, said that he might participate in some small business start-up programs on a limited basis.

Other interviewees thought that the provision of other business start-up assistance would not be beneficial to small businesses. [Interviewees #: 16, 33, TA #5]. Interviewee #33, the Caucasian male president of an engineering firm, stated that he does not think start-up assistance would be helpful for small businesses, including MBE/WBE/DBEs. He added, "If they don't know how to run their businesses, then they shouldn't be in the game."

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that he does not believe that it would be helpful for ODOT to offer this type of assistance.

J. Information on public agency contract procedures and bidding opportunities.

Some interviewees reported that they were aware of information on public agency contract procedures and bidding opportunities. [Interviewees #: 3, 6, 9, 10, 13, 14, 17, 19, 27, 28, 32, 33, 36, 42, TA #1, TA #2, TA #3, TA #5, TA #9, TA #10]. Interviewee #9, the African American owner of a non-certified trucking company, said that he was aware of such information, but he has not participated.

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, reported "The DOT does a good job of getting their information online. There [are] a couple places they could fix. I really strongly recommend they mimic Texas in regards to that because I think they have a good program, but in general, Oklahoma does good on that." Interviewee #10 commented, "But they don't provide assistance to you during the bid process." He said that he thinks that there has only been one class on using their bidding software in the last 20 years.

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, said, "I've gone to their DBE conference ... and it's been helpful.

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that he was aware of ODOT providing public information on agency contracting procedures and bidding opportunities. He said that ODOT will send out a notice of contracts that they are going to be letting out to bid, and you have the option of pulling the plans and putting a bid in or not.

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned bridge design engineering firm, said that he is aware of information relating to public agency and contracting procedures on the ODOT website.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that she does not have direct experience with information on public agency contracting procedures and bidding opportunities. She stated that she is aware of the use of the measure by ODOT but stated, "You have to dig pretty deep to find it."

Interviewee #33, the Caucasian male president of an engineering firm, stated that he has had direct experience with information on public agency contracting procedures and bidding opportunities. He said that he is not aware of any use of the measure by ODOT.

Interviewee #36, a Caucasian female senior engineer of an engineering firm, stated that she has not had any direct experience with any programs providing information on public agency contracting procedures and bidding opportunities, but is aware of such programs existing. She stated that she is not aware of any use of the measure by ODOT.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that that she has had direct experience with programs providing information on public agency contracting procedures and bidding opportunities through the Cherokee Nation. She added that she is not aware of any use of the measure by ODOT.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, stated "I think [ODOT] provides everyone [with] the same information [about contracting procedures and opportunities to bid], and it seems like they're doing what they need to do."

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that he is aware of ODOT providing this information. He added that he doubts that it is helpful "based on their record."

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that he has direct experience with and is aware of available information concerning public agency contracting procedures and bidding opportunities. He stated that he is aware of ODOT doing a pretty good job of providing this assistance, and he believes it to be helpful to small businesses.

Some interviewees reported that they were not aware of any information on public agency contract procedures and bidding opportunities. [Interviewees #: 1, 2, 4, 5, 7, 8, 11, 18, 20, 21, 26, 29, 30, 31, 34, 35, 37, 38, 39, 40, 41, 43, 44, 45, 46, 47, 48, TA #6, TA #7].

Some interviewees thought that the provision of information on public agency contract procedures and bidding opportunities could be beneficial to small businesses. [Interviewees #: 2, 3, 4, 5, 6, 7, 8, 13, 15, 17, 20, 21, 28, 29, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, TA #1, TA #2, TA #5, TA #6, TA #7, TA #9, TA #10]. Interviewee #6, the

African American owner of a DBE-certified trucking company, said that this has been helpful, but he said that he can get the same information that ODOT provides directly from the primes as well.

Interviewee #15, the Caucasian male co-owner and manager of an engineering firm, said that he would find it helpful to attend seminars with other agencies and programs regarding contracting and bidding.

Interviewee TA #2, the executive director of a Hispanic trade association, said that he would like to see more of this, and "the outreach portion [of ODOT] needs to be worked on ... in the Hispanic community."

A couple of interviewees reported that the provision of information on public agency contract procedures and bidding opportunities would not be beneficial to small businesses. [Interviewees #: 33, TA #3]. Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that he is aware of ODOT providing this information. He added that he doubts that it is helpful "based on their record."

K. Online registration with a public agency as a potential bidder.

Some interviewees reported that they were aware of opportunities to become registered to receive information as a potential bidder. [Interviewees #: 2, 3, 8, 9, 10, 11, 14, 29, 31, 32, 33, 34, 36, 37, 38, 46, TA #2, TA #3, TA #5, TA #9]. Interviewee #8, the African American president and owner of a civil and structural engineering firm, said that he is "almost certain" that this is available to some extent online.

Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, reported that the company is registered and has a profile online with ODOT as potential bidder for the DBE Program.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, said that he was aware of CCR registration with the federal government, which is a requirement to do business with the federal government. He said that he was also aware of registration requirements with some very large primes. He stated that most large contractors do a good job of reaching out in their diversity. He said that they often have a registration process and requirement to be plugged into their system. He commented that this can be a challenge for very small minority- or women-owned firms because it takes a fair amount of computer and online access and proficiency, and it can be a hard task.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that he is aware of the City of Tulsa offering online registration. He stated that he is not aware of ODOT offering this service.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, reported that although she is aware of online registration being available to potential bidders, she has not had any direct experience with online registrations. She stated that she is not aware of ODOT providing online registration to potential bidders.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that she does have direct experience with online registration with public agencies as a potential bidder. She also reported that she is aware of the use of the measure by ODOT.

Interviewee #33, the Caucasian male president of an engineering firm, stated that he has had direct experience with registering online with a public agency as a potential bidder. He stated that he is not aware of any use of the measure by ODOT.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm stated that he is aware of online registrations existing but that he has not had any direct experience with online registrations with a public agency as a potential bidder. He stated that he is aware of online registration being used by ODOT.

Interviewee #36, a Caucasian female senior engineer of an engineering firm, stated that she has had direct experience with public agencies providing online registration as a potential bidder. She stated that she is not aware of any use of the measure by ODOT.

Interviewee #37, the African American male owner of an engineering firm, stated that he has had direct experience with programs providing online registration with a public agency as a potential bidder. He stated that he is aware of ODOT providing online registration and thinks it is helpful for small businesses, including MBE/WBE/DBEs.

Interviewee #46, the African American male owner of a DBE-certified safety and environmental consulting firm, stated that he has had direct experience with programs providing online registration with a public agency as a potential bidder through the Environmental Protection Agency. Interviewee #46 stated that he is not aware of ODOT providing online registration.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that a lot of this is already online.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that he has direct experience with and is aware that online registration is available, but he is not aware of ODOT offering this service.

Some interviewees reported that they were not aware of opportunities to become registered with an agency as a potential bidder. [Interviewees #: 1, 4, 5, 7, 17, 18, 19, 20, 21, 26, 28, 30, 35, 39, 40, 41, 42, 43, 44, 45, 47, 48, TA #1, TA #6, TA #10].

Most interviewees thought that allowing a business to complete online registration with a public agency as a potential bidder could be beneficial to small businesses. [Interviewees #: 2, 4, 5, 6, 7, 8, 9, 17, 20, 21, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 46, 47, 48, TA #1, TA #2, TA #5, TA #6, TA #9, TA #10]. Interviewee #6, the African American owner of a DBE-certified trucking company, said that this would be helpful to a prime contractor but not a subcontractor.

Interviewee #38, the Native American female president of an engineering firm, stated that she is aware of ODOT providing online registration and thinks it is helpful for small businesses including MBE/WBE/DBEs.

L. Hard copy or electronic directory of potential subcontractors.

Some interviewees reported that they were aware of hard copy or electronic directories of potential subcontractors. [Interviewees #: 2, 3, 4, 8, 9, 10, 11, 13, 14, 16, 17, 18, 19, 21, 27, 28, 29, 31, 32, 33, 34, 35, 37, 38, 39, 40, 41, 42, 43, 45, 46, 47, 48, TA #1, TA #2, TA #3, TA #5, TA #7, TA #9]. Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, said that ODOT maintains an electronic copy of potential subcontractors. He stated that the City also has such a list available upon request.

Interviewee #8, the African American president and owner of a civil and structural engineering firm, said that he thinks that ODOT does this, and it is helpful.

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, said, "There's an electronic copy of registered contractors that ... we use, and there's an electronic copy buried in the website of their DBE firms. Last time we couldn't find it because they changed the links, so we had to actually call the office for the URL." He added that the website is not user-friendly anymore.

Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, said that the company has knowledge of the subcontractor directory. She added that there is a list that she can search.

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, said that he is aware of a directory of DBEs.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, reported that he was aware of hard copies of electronic directories of potential subcontractors. He stated that DBE lists are published and that ODOT has an online directory.

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, commented that he has used this directory, but only rarely.

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that ODOT only has a list of DBE subcontractors. He said that a list of all subcontractors would be helpful to small businesses.

Interviewee #18, the Caucasian male treasurer of a Caucasian male-owned heavy paving and grading construction firm, said that ODOT publishes a DBE list, and it is posted on the ODOT website.

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned bridge design engineering firm, said that he is aware of a directory or list for the engineering board, and on the contractor side, he believes ODOT maintains a list of potential subcontractors.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated that she has had direct experience with hard copies or electronic directories being available to potential subcontractors. She stated that she is not aware of ODOT making hard copies or electronic directories available to potential subcontractors.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that she does have direct experience with hard copies or electric directories of potential subcontractors through a membership with a non-profit. She stated that she is not aware of any use of the measure by ODOT and thinks it would be helpful for small businesses, including MBE/WBE/DBEs. She stated, "It would be a wonderful thing to not have to pay for it."

Interviewee #33, the Caucasian male president of an engineering firm, stated that he has had direct experience with hard copies or electronic directories of potential subcontractors. He said that he is not aware of any use of the measure by ODOT.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm, stated that he is aware of and has had direct experience with hard copies or electronic directories of potential subcontractors being made available to potential bidders. He stated that he is aware that hard copies or electronic directories are made available to potential bidders by ODOT.

Interviewee #35, the Native American female president of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated that she has had direct experience with an initiative providing hard copies or electronic directories of potential subcontractors through the AGC and the American Traffic Safety Service Association (ATSSA). She stated that she is aware ODOT provides hard copies or electronic directories of potential subcontractors.

Interviewee #37, the African American male owner of an engineering firm, stated that he is aware that ODOT maintains hard copies and electronic directories of potential subcontractors.

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that she is aware that ODOT, the City of Tulsa, and Native American Tribes maintain hard copies and electronic directories of potential subcontractors only when required.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that he is aware that ODOT provides a list of certified subcontractors.

Interviewee #41, the Hispanic male owner of a DBE-certified trucking firm, stated that he is aware that ODOT provides a listing of certified subcontractors.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that she has had direct experience with programs providing hard copies or electronic directories of potential subcontractors. Interviewee #42 added that she is aware that ODOT does provide a listing of certified subcontractors.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that he has had direct experience with programs providing hard copies or electronic directories of

potential subcontractors. Interviewee #45 stated that he is aware that ODOT does provide a listing of certified subcontractors.

Interviewee #46, the African American male owner of a DBE-certified safety and environmental consulting firm, stated that he is aware that ODOT maintains hard copies and electronic directories of potential subcontractors.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, said that he believes that ODOT maintains a list of prequalified subcontractors.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated he has direct experience with and is aware of hard copies of electronic directories being available. He stated that ODOT is pretty good at offering this assistance and making the information available.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that he is aware of the SBA 8(a) program where the public has the ability to view certified companies. He also stated that ODOT has a DBE directory available online.

Other interviewees reported that they were not aware of electronic and hard copies of directories of potential subcontractors. [Interviewees #: 1, 5, 6, 7, 12, 15, 20, 26, 30, 36, 44, TA #4, TA #6, TA #10]. Interviewee #1, the Caucasian male chief financial officer of a Caucasian male-owned heavy highway and bridge construction firm, said that he did not know whether ODOT maintained a directory of potential subcontractors, but he reported that potential subcontractors can obtain from ODOT a list of the prime contractors that have pulled plans.

Interviewee #6, the African American owner of a DBE-certified trucking company, said that he was not sure if anyone provided a list of subcontractors, but he did know of lists containing DBEs that are posted online.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, reported that he does not know if this exists, but he does not think it does.

Interviewee TA #6, the president of a minority business development agency, stated that his clients have not had direct experience with hard copies or electronic directories of potential subcontractors and that he is not aware of any use of the measure by ODOT.

Some interviewees thought that the provision of a hard copy or electronic directories of potential subcontractors would be beneficial to small businesses. [Interviewees #: 2, 3, 4, 5, 6, 7, 8, 9, 15, 17, 20, 21, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 47, 48, TA #1, TA #2, TA #3, TA #4, TA #5, TA #6, TA #7, TA #9, TA #10]. Interviewee #6, the African American owner of a DBE-certified trucking company, said that a list of subcontractors would be helpful to the subcontractors, but the list would be enormous.

Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that this would be very helpful because it is "an administrative burden ... that many [companies] will not" take on.

Interviewee #15, the Caucasian male co-owner and manager of an engineering firm, said, "I have my list of contractors that I send the bids out to, and I welcome any other contractor if they want to get on the list [to] send me some data about yourself and some references, and I check it out."

Interviewee #21, the Caucasian male general manager of a Caucasian male-owned bridge construction firm, was aware of this measure and described it as beneficial, but complained that it was not compartmentalized enough, i.e., that a lot of businesses that do very different things are lumped together so the list is unorganized.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that she thinks providing a list of potential subcontractors would be helpful for small businesses including MBE/WBE/DBEs. She stated, "It would be a wonderful thing to not have to pay for it."

A couple of interviewees did not think that the provision of a hard copy or electronic directory of potential subcontractors would be beneficial to small businesses. [Interviewees #: 43, 46]. Interviewee #46, the African American male owner of a DBE-certified safety and environmental consulting firm, stated that in his opinion the provision of a hard copy or electronic directories of potential subcontractors has not been helpful for his firm or other small businesses, including MBE/WBE/DBEs.

M. Pre-bid conferences where subcontractors can meet prime contractors.

Some interviewees reported that they were aware of pre-bid conferences that allow subcontractors to meet prime contractors. [Interviewees #: 1, 2, 3, 4, 6, 7, 9, 16, 17, 18, 20, 21, 23, 27, 29, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 48, TA #3, TA #4, TA #5, TA #7, TA #9, TA #10]. Interviewee #1, the Caucasian male chief financial officer of a Caucasian maleowned heavy highway and bridge construction firm, stated that ODOT holds pre-bid conferences, and these are sometimes very helpful.

Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, stated that he has attended pre-bid conferences, but "[they] have been very non-productive."

Interviewee #3, the Caucasian male president of a civil engineering firm, said that the Oklahoma City Chamber of Commerce provides networking programs, but he was not aware of such a program provided by ODOT.

Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that he has attended pre-bid conferences at ODOT in the past.

Interviewee #7, the Native American owner of a federally-certified aerospace firm, reported that the federal government provides these a lot, but he is not aware of this occurring with ODOT.

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, said that he has attended pre-bid conferences.

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that ODOT has a pre-bid conference every month, and it is helpful.

Interviewee #18, the Caucasian male treasurer of a Caucasian male-owned heavy paving and grading construction firm, was aware of the conferences and said that they are published on the ODOT website.

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, said that he is aware of pre-bid conferences, but stated that he has never attended one; he is told they are not helpful.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that he is aware of pre-bid conferences being available and knows that ODOT has sponsored such events in the past, but he reported that he has never attended.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that she does have direct experience with pre-bid conferences where subcontractors and primes meet. She also reported that she is aware of the use of the measure by ODOT, that she attends every pre-bid conference, and that she believes it is helpful for small businesses including MBE/WBE/DBEs.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm, reported that he is aware of ODOT holding monthly pre-bid conferences where subs meet primes.

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that she is aware that ODOT provides pre-bid conferences, but she has never attended a pre-bid conference.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that that he is aware ODOT provides pre-bid conferences and that he gets the notices of the conferences, but stated that he does not attend.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that he has had direct experience with programs or initiatives providing pre-bid conferences where subs and primes meet. Interviewee #48 stated that he is aware that ODOT holds pre-bid conferences.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that he is aware that ODOT has pre-bid meetings every month before the bid date, but he has never attended.

Other interviewees reported that they were not aware of any pre-bid conferences that allow subcontractors to meet prime contractors. [Interviewees #: 5, 8, 11, 12, 13, 19, 26, 30, 31, 33, 46, 47, TA #1, TA #2, TA #6].

Some interviewees thought that pre-bid conferences to allow subcontractors to meet prime contractors could be beneficial to small businesses. [Interviewees #: 1, 4, 5, 6, 7, 8, 9, 17, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 40, 42, 43, 44, 45, 46, 47, 48, TA #2, TA #4, TA #5, TA #6, TA #9, TA #10]. Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, said these conferences are helpful because they provide the prime contractors and subcontractors the opportunity to meet in person and put a face with a name.

Interviewee #6, the African American owner of a DBE-certified trucking company, said that these are good opportunities for subcontractors and primes to meet and form a relationship.

Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that these programs are helpful to meet primes and competitor subcontractors.

Interviewee #9, the African American owner of a non-certified trucking company, said that these conferences are "helpful to ... meet people, talk about the job before you bid on it, find [out] more about what you're bidding on."

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, reported that he thinks that pre-bid conferences are very valuable. He said that the organization's members do not take advantage of them, though, adding, "There's so much that they don't know that they need to know, and a lot of it is stuff you're not going to get in a classroom setting, and part of that is working side-by-side and interacting with people that are in the business."

Some interviewees did not think that pre-bid conferences to allow subcontractors to meet prime contractors were particularly beneficial to small businesses. [Interviewees #: 20, 21, 41, TA #3, TA #7]. Interviewee #41, the Hispanic male owner of a DBE-certified trucking firm, reported that he is aware that ODOT provides pre-bid conferences, but he does not attend because at pre-bid conferences and meetings, such as DBE conferences, it appears that the primes are forced to attend by ODOT and are on their best behavior; however, after the meetings, there is no contact or additional work generated.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that one can look to the numbers to see that pre-bid conferences are not helpful.

N. Distribution of plan holders' lists or other lists of potential prime bidders to subcontractors.

Some interviewees reported that they were aware of distribution lists to subcontractors of plan holders concerning other potential prime bidders. [Interviewees #: 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 14, 17, 18, 19, 20, 21, 29, 32, 33, 34, 35, 36, 37, 38, 39, 41, 42, 43, 44, 45, 46, TA #1, TA #2, TA #3, TA #5]. Interviewee #1, the Caucasian male chief financial officer of a Caucasian male-owned heavy highway and bridge construction firm, stated that ODOT provides plan holders' lists and these lists are very helpful.

Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, said that ODOT does "a fine job with" distribution of plan holders' lists and noted that the information is available online.

Interviewee #3, the Caucasian male president of a civil engineering firm, stated that ODOT does distribute plan holders' lists.

Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that he pays an annual fee of \$1000 to obtain a weekly plan holders' list. He said that if the State provided this list, it would save him \$1000 a year.

Interviewee #5, the Caucasian male co-owner of a geotechnical engineering firm, reported that "there are lists like that," but he is not aware of ODOT having these lists.

Interviewee #8, the African American president and owner of a civil and structural engineering firm, said that he thinks that this is being done, and it is helpful.

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, said, "The online lists are usually running behind, but in general if you know which office to ask, which is not always clear, you can [find the information]."

Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, reported that the prime contractor and plan holders' list is online.

Interviewee #12, the owner of a female-owned non-certified civil engineering and land surveying firm, commented that he was "aware of the bid news services that list plan holders, and I could see that there would be a possibility of contacting some of those plan holders to offer surveying services."

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, reported that there are some good computer systems that a lot of contractors use that facilitate online access to plans and bid notices. He said that those are very good and should be used more.

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that ODOT has a plan holders' list.

Interviewee #18, the Caucasian male treasurer of a Caucasian male-owned heavy paving and grading construction firm, was aware of lists of plan holders and prime bidders being published to potential subcontractors.

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned bridge design engineering firm, said that he believes ODOT maintains a list of plan holders.

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, stated that ODOT provides plan holders' lists but that they are not very helpful in hard copy.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated that she has had direct experience with lists of plan holders being made available through bidnews.com and other sites. She stated that she is not aware of ODOT providing lists of plan holders.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that she does have direct experience with distribution of lists of plan holders or other lists of possible prime bidders to potential subcontractors. She also stated that she is aware of the use of the measure by ODOT and thinks it is very helpful for small businesses, including MBE/WBE/DBEs.

Interviewee #33, the Caucasian male president of an engineering firm, reported that he has had direct experience with distribution of lists of plan holders or other lists of possible prime bidders to potential subcontractors, and he is aware of the use of the measure by ODOT.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm, stated that he is aware of the distribution of lists of plan holders or other possible prime bidders to potential subcontractors by ODOT.

Interviewee #37, the African American male owner of an engineering firm, stated that he is aware that ODOT makes the list of plan holders available online and thinks it is helpful for small businesses including MBE/WBE/DBEs.

Interviewee #41, the Hispanic male owner of a DBE-certified trucking firm, reported that he is aware of such a list being available on the Internet. He noted that he is not aware of any use of the list by ODOT.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that that she was aware of the distribution of lists of plan holders or other lists of possible prime bidders to potential subcontractors, but not by ODOT.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that he is aware that a list can be obtained from ODOT's website.

Interviewee #46, the African American male owner of a DBE-certified safety and environmental consulting firm, stated that he is aware that ODOT makes the list of plan holders available online.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, reported that ODOT distributes lists of plan holders and potential prime bidders to subcontractors.

Interviewee TA #2, the executive director of a Hispanic trade association, said that he is aware that this is done, but it is not done very well within the Hispanic community.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that plan holders' lists are readily available, but people know who the job is going to.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that he has direct experience with the availability of a distributed list of plan holders, and he is aware that ODOT provides this service.

Some interviewees reported that they were not aware of any distribution to subcontractors of plan holders' lists or lists of other potential prime bidders. [Interviewees #: 7, 26, 30, 40, TA #6, TA #9, TA #10].

Some interviewees thought that the distribution to subcontractors of plan holders' lists or lists of other potential prime bidders could be beneficial to small businesses. [Interviewees #: 1, 2, 3, 4, 6, 7, 8, 9, 12, 14, 27, 29, 30, 31, 32, 33, 34, 35, 36, 38, 39, 40, 41, 42, 43, 44, 45, TA #1, TA #2, TA #5, TA #6, TA #9, TA #10]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, said that ODOT does "a fine job with" distribution of plan holders' lists and commented that that information is available online.

Interviewee #3, the Caucasian male president of a civil engineering firm, stated that ODOT does distribute plan holders' lists and it is helpful to make small businesses aware of who the prime contractors are, and also to help the prime contractors identify their competition.

Interviewee #9, the African American owner of a non-certified trucking company, said that lists of people who have been awarded bids are helpful to find out who got the contracts and see if they need any trucks.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated that she believes "providing free lists of plan holders would be helpful for small businesses because all of the sources [we] use cost" money.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that she thinks it is "very" helpful for small businesses, including MBE/WBE/DBEs.

Some interviewees reported that they did not think that the distribution to subcontractors of plan holders' lists or lists of other potential prime bidders would be beneficial. [Interviewees #: 5, 20]. Interviewee #5, the Caucasian male co-owner of a geotechnical engineering firm, said that he does not think that these lists are particularly helpful because "by the time these lists ... notices come out about projects, my type of work's already been done. They're mostly for construction bidders."

Interviewee #20, the president of a Caucasian male-owned systems utility contracting firm, stated that ODOT provides plan holders' lists but that they are not very helpful in hard copy.

O. Other agency outreach.

Some interviewees reported that they were aware of agency outreach. [Interviewees #: 6, 8, 10, 14, 17, 19, 28, 29, 32, 33, 35, 36, 37, 38, 39, 41, 42, 43, 44, 46, 47, 48, TA #1, TA #2, TA #3, TA #5, TA #7, TA #9, TA #10]. Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, said that the only vendor fairs of which he is aware occur when the AGC and ODOT partner in a presentation, and ODOT is usually represented at "the OAPA and the Concrete Pavers Association meetings," but ODOT does not really originate anything.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, said that there is an abundance of agency outreach all of the time. He said that this has not been true as much in recent times, but he said that he did a lot of this as he built his business.

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that ODOT does perform other agency outreach. He stated that he has attended some programs sponsored by ODOT, and they have been helpful.

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned bridge design engineering firm, stated that ODOT has held a few networking events. He reported that they hold standard meetings and that bid-opening meetings are a kind of networking event.

Interviewee #28, the Native American female president of a trucking and excavating firm, stated that she has had direct experience with other agency outreach, such as the OMSDC sponsoring events.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that he is aware of other agency outreach. He stated that he was aware of ODOT and the City of Tulsa offering such events, but he reported that he does not believe it to be very helpful for small businesses.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that she does have direct experience with other agency outreach, such as the Association of General Contractors (AGC), which has monthly luncheons and conventions throughout the year that are very helpful. She reported that she is not aware of any use of the measure by ODOT and would like to see ODOT offer free activities because she believes that it is helpful to small businesses, including MBE/WBE/DBEs.

Interviewee #33, the Caucasian male president of an engineering firm, stated that he has had direct experience with other agency outreach, such as a professional trade association of engineers hosting networking events. He also said that he is aware of the use of the measure by ODOT.

Interviewee #37, the African American male owner of an engineering firm, stated that he has had direct experience with other agency outreach opportunities but has not found them to be very helpful. Interviewee #37 stated that he is aware of ODOT providing agency outreach opportunities, but again does not think it is very helpful for small businesses, including MBE/WBE/DBEs.

Interviewee #41, the Hispanic male owner of a DBE-certified trucking firm, reported that he is aware that ODOT is planning an outreach activity in the next month or so.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that that she has had direct experience with other agencies providing outreach opportunities through the City of Tulsa. She stated that she is not aware of any use of the measure by ODOT.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that they attended some networking breakfasts sponsored by ODOT.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, said that ODOT does some outreach "two or three times a year," and it is "a worthwhile effort." He cited as an example an upcoming program to teach DBEs how to bid, how to read plans, and to explain what it is that general contractors are looking for. He said that ODOT reached out to the AGC to make sure that at least 10 general contractors would participate in the program.

Interviewee TA #2, the executive director of a Hispanic trade association, said that he has seen some of this, but he "would like to see more participation in the Hispanic community through some of the things that go on in the community that affect the community," like at the organization's exposition. He stated that presentations need to be provided in both Spanish and English.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that other outreach is available, but not by ODOT.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that he has direct experience with agency outreach being available.

Interviewee TA #7, the director of an organization that provides assistance to small businesses, said that she was aware of one or two instances of agency outreach, but she could not supply further information.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that to a very limited extent he is aware of other agencies and programs providing outreach activities. He stated that he is aware that ODOT recently held a second DBE conference. He stated that he learned about the first ODOT DBE conference on the day before the event and only learned about the second ODOT DBE conference one week before the event. Interviewee TA #9 stated that his agency was not included in the mailing list.

Some interviewees reported that they were not aware of agency outreach. [Interviewees #: 2, 4, 5, 9, 11, 12, 16, 20, 21, 26, 30, 31, 34, 40, TA #6].

Some interviewees thought that other agency outreach, including, for example, vendor fairs and events, could be beneficial to small businesses. [Interviewees #: 4, 5, 6, 7, 9, 15, 17, 20, 27, 28, 30, 31, 32, 33, 34, 35, 36, 38, 39, 40, 41, 42, 43, 44, 47, 48, TA #2, TA #3, TA #5, TA #6, TA #9, TA #10]. Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that this should be done more and that it is very helpful.

Interviewee #15, the Caucasian male co-owner and manager of an engineering firm, said that he is open to agency outreach, but the only place that he ever sees anything about it is in the "Journal Record." He said that he looks in that paper for "notice to bidders, things like that in the back. I've been reading it for seven years, and I just found that about three months ago."

Interviewee #38, the Native American female president of an engineering firm, stated that she is aware of ODOT sponsoring and participating in these networking events and thinks it should be improved. Interviewee #38 stated that when she attends outreach events sponsored by ODOT she realizes that the representatives from ODOT in attendance are lower-level employees that do not make any decisions, cannot answer questions, only collect business cards, and are not very effective. She stated that if done properly, agency outreach initiatives could be very helpful for small businesses, including MBE/WBE/DBEs.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that he is aware that ODOT provides outreach opportunities and he has found them to be extremely helpful for small businesses, including MBE/WBE/DBEs.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that he has direct experience with agency outreach being available and that he believes it to be helpful for small business. He stated that this is a weak area for ODOT and that he believes ODOT needs to create some initiatives in this area. He stated, "ODOT's outreach doesn't match up with the amount of money that goes through the program."

Other interviewees reported that they did not think that other agency outreach would be helpful to small businesses. [Interviewees #: 1, 8, 29, 37, 46]. Interviewee #1, the Caucasian male chief financial officer of a Caucasian male-owned heavy highway and bridge construction firm, stated that he is not a big advocate of vendor fairs and does not find them useful.

Interviewee #8, the African American president and owner of a civil and structural engineering firm, said that he does not think that agency outreach initiatives are helpful. He reported that he has only been to one in 30 years, but he has not been back. He said that he thinks that they are more "social" than anything else.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, reported that he does not believe agency outreach to be very helpful for small businesses. Interviewee #29 stated that "the initial contact of course is helpful, but nothing results of it."

Interviewee #46, the African American male owner of a DBE-certified safety and environmental consulting firm, stated that he is aware that ODOT provides outreach opportunities but does not think it was very helpful for his business. He stated that he attended ODOT's recent activity and did not stay because it was not useful for his firm.

P. Streamlining or other simplification of bidding procedures.

Some interviewees reported that they were aware of steps taken to streamline the bidding process. [Interviewees #: 2, 3, 10, 14, 18, 32, 33, 36, TA #4, TA #5]. Interviewee #3, the Caucasian male president of a civil engineering firm, said, "I think [ODOT] has done an excellent job of streamlining [the bidding procedures]." He said that ODOT has done a lot of work in the last year to get to that point.

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, reported that "they've been working on it for years and years and years. I think they've got it about as simple and streamlined as they're going to be able to get."

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, reported he is aware of simplification within the bidding procedures. He said that things have started to go electronic and that this is a double-edged sword, enhancing access in many ways but also challenging small contractors who may not be proficient in computers.

Interviewee #18, the Caucasian male treasurer of a Caucasian male-owned heavy paving and grading construction firm, reported that he was aware of several ongoing task forces that ODOT has sponsored to review the bidding procedures and other things.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that she does not have any direct experience with streamlining or simplification of bidding procedures but that she is aware of the use of the measure by ODOT. She stated, "ODOT has done a good job with streamlining the bid process."

Interviewee #36, a Caucasian female senior engineer of an engineering firm stated that she has had direct experience with programs and agencies streamlining and simplifying their bidding procedures. She stated that ODOT's bidding procedures are the streamlined and simplified version.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, reported that ODOT has attempted to introduce some streamlined bidding procedures. He also said that the Oklahoma Construction Management Division for the Department of Central Services and the federal government have also engaged in streamlining the bidding process. He added that the federal changes have been very successful.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that he has direct experience with the streamlining of the bidding process and reported that the process seems user-friendly, particularly through ODOT.

Other interviewees reported that they were not aware of any steps taken to streamline the bidding process. [Interviewees #: 4, 5, 7, 8, 11, 12, 13, 16, 19, 20, 21, 26, 27, 28, 30, 31, 34, 35, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, TA #1, TA #2, TA #3, TA #6, TA #7, TA #9, TA #10]. Interviewee #19, the Caucasian male chief engineer of a Latino male-owned bridge design engineering firm, was not aware of efforts by ODOT to streamline the bidding process other than allowing bids to be submitted by e-mail.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that the bidding process already seems streamlined within ODOT, but he stated that he is not aware of any program or initiative to streamline the bidding procedures.

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that that she has not had any direct experience with programs or initiatives to streamline and simplify bidding procedures, but that ODOT has a pretty simplified bidding process already.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, reported that he was not aware of ODOT taking measures to streamline or simplify the bidding process.

Some interviewees thought that the streamlining or other simplification of bidding procedures could be beneficial to small businesses. [Interviewees #: 2, 3, 4, 7, 9, 20, 28, 29, 30, 31, 32, 33, 34, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, TA #1, TA #2, TA #3, TA #5, TA #6, TA #7, TA #9, TA #10]. Interviewee #9, the African American owner of a non-certified trucking company, that this could be helpful, but he said, "I don't see how it could get too much easier."

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that she is aware of the use of the measure by ODOT and thinks it would be helpful for small businesses, including MBE/WBE/DBEs. She stated, "ODOT has done a good job with streamlining the bid process."

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, said that this might be a good idea if ODOT can do so "without putting jobs at risk," but he commented that "the bidding procedures are complicated because you are dealing with multi-million-dollar projects." He said that the procedures need to be "thorough and accurate and responsible," but they could be streamlined.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that it is helpful "anytime you can simplify the process," because it is easier for small businesses to succeed.

Some interviewees did not think that it was necessary for ODOT to streamline or otherwise simplify its bidding procedures. [Interviewees #: 1, 8, 17, 35]. Interviewee #1, the Caucasian male chief financial officer of a Caucasian male-owned heavy highway and bridge construction firm, stated that he did not know how ODOT could streamline the bidding process more so than it already is.

Interviewee #8, the African American president and owner of a civil and structural engineering firm, said that he does not think that it would be helpful because he does not know what you could streamline because of the contract specifications. He said, "It is what it is."

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that he did not have a lot of complaints with ODOT's bidding system.

Interviewee #35, the Native American female president of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated that she is not sure if simplifying the bidding procedures would be helpful for small businesses because it is pretty streamlined and simplified already.

Q. Segmenting larger contracts into smaller pieces.

Some interviewees were aware of efforts to segment larger contracts into smaller pieces. [Interviewees #: 1, 3, 10, 14, 17, 19, 31, 33, 36, 37, 48, TA #1]. Interviewee #1, the Caucasian male chief financial officer of a Caucasian male-owned heavy highway and bridge construction firm, stated that ODOT does a good job of breaking up large contracts into smaller pieces.

Interviewee #3, the Caucasian male president of a civil engineering firm, said that ODOT is breaking up "a lot" of contracts into smaller pieces "to my chagrin. I need the larger ones to stay afloat."

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, said that ODOT segments larger contracts into smaller pieces all the time; "even when it may not be in their best interest, they do that." He added that ODOT has done a good job with this.

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that he was aware of ODOT breaking up larger contracts into smaller ones; he stated that this is "sometimes" helpful. He said that if it is a \$100 million job, he would like to see it broken down, but if it is for a smaller amount (e.g., a \$15 million job), he is against ODOT breaking up the contract.

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned bridge design engineering firm, reported that he was aware of efforts to break up larger contracts into smaller pieces.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated that she has had direct experience with larger contracts being broken down into small contracts, but was not aware of ODOT doing this.

Interviewee #33, the Caucasian male president of an engineering firm, stated that he has had direct experience with the breaking up larger contracts into smaller pieces and he is aware of the use of the measure by ODOT.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, said "I believe that [ODOT] has tried to [break up larger contracts into smaller pieces] when and where appropriate." He commented that sometimes projects cost more to break up, but it is his understanding that ODOT does a good job of breaking up large contracts when and where appropriate and this is helpful to small businesses.

Some interviewees were not aware of any efforts to segment larger contracts into smaller pieces. [Interviewees #: 2, 4, 5, 6, 7, 8, 9, 11, 12, 13, 20, 21, 26, 28, 29, 30, 32, 34, 35, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, TA #2, TA #3, TA #5, TA #6, TA #7, TA #9, TA #10]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, stated that ODOT is not currently breaking up large contracts into smaller ones.

Interviewee #21, the Caucasian male general manager of a Caucasian male-owned bridge construction firm, said that ODOT does not break up large contracts into smaller pieces and "this definitely needs to be done."

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that she has not had any direct experience with programs breaking up large contracts into smaller pieces. She reported that now the trend is to lump several contracts into one large project.

Some interviewees thought that segmenting larger contracts into smaller pieces could be beneficial to small businesses. [Interviewees #: 2, 4, 5, 7, 8, 9, 12, 13, 14, 16, 17, 18, 19, 20, 21, 27, 28, 29, 30, 31, 32, 33, 34, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, TA #1, TA #2, TA #3, TA #4, TA #6, TA #7, TA #9, TA #10]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, said that "I would like to see some of that done."

Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that he has not heard of the State breaking up large contracts into smaller pieces, but that it would help a lot. He said that the State has let contracts in excess of \$10 million, and only one company has the bonding capacity to bid on this job. He stated that if the State were to break down such a contract into \$5 million increments, that would provide him with the opportunity to bid.

Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that this would be very helpful and added, "Under the Army Corp of Engineers, generally 40 percent of the work is designated to the small businesses." He said that a large prime will come in to perform the work, and that prime will go to subcontractors to actually complete the work. He stated that the primes usually do not know where to find the small or minority businesses or have not worked with them before, so they cannot hire a proven subcontractor. Additionally, he said that the primes are afraid of the financial capabilities of the small businesses to do the work without defaulting and having liens placed on the project.

Interviewee #8, the African American president and owner of a civil and structural engineering firm, said that this may be helpful "as long as you gave those smaller pieces to the smaller entities that otherwise would have been part of a prime contract."

Interviewee #9, the African American owner of a non-certified trucking company, said, "That would help," and that "would ... keep [the people who are] getting all the jobs from getting all the jobs."

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, said that he was unsure if segmenting large projects into smaller pieces was feasible, but he thought it could be helpful.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, reported that he is aware of some attempts to segment large contracts, but he said that he still thinks that it is a big problem and that bundling is a big barrier to small contractors of any race or gender.

Interviewee #18, the Caucasian male treasurer of a Caucasian male-owned heavy paving and grading construction firm, said that there has been a long-standing request by contractors in-state for ODOT to break up contracts. He said that this would be helpful and commented that the larger contracts attract people from out-of-state.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm, stated that he has not had any direct experience with breaking up larger contracts into smaller pieces. He stated that he is not aware of any use of the measure by ODOT, but stated, "I wish they would." Interviewee #34 stated that he believes breaking up large contracts into smaller pieces would be helpful for small businesses, including MBE/WBE/DBEs.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, stated that sometimes projects cost more to break up, but it is his understanding that ODOT does a good job of breaking up large contracts when and where appropriate and this is helpful to small businesses.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, said that he would "love to see that. That solves our undercapitalization issue because ... it provides a chance for our members to really have a chance to compete."

Some interviewees expressed concerns regarding segmenting projects or stated that segmenting projects would not be beneficial. [Interviewees #: 3, 6, 15, 35, TA #5]. Interviewee #3, the Caucasian male president of a civil engineering firm, said, "I need the larger [projects] to stay afloat."

Interviewee #6, the African American owner of a DBE-certified trucking company, said that he does not "think it'd be a good idea.... If you broke up one large project into several small little projects, that means you have to deal with that many more primes."

Interviewee #15, the Caucasian male co-owner and manager of an engineering firm, commented, "I would love to say yes, but whatever's the most efficient is what I'd have to vote for. I mean ... I've seen too many things bogged down by red tape." He commented that he would not want to see the government force a specific large local company that gets a lot of government contracts "to sub things out when they've already got it handled. They're getting the job done."

Interviewee #35, the Native American female president of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated that she has not had any direct experience with any programs breaking up large contracts into smaller pieces. She stated that she is not aware of any use of the measure by ODOT and does not believe it would be helpful, but harder for small business to break up large contracts into smaller pieces.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, stated that he actually believes that bigger contracts have a more diverse scope of work and higher DBE goals. He stated, "Smaller projects tend to have smaller DBE goals, so it would be counter to DBE interest to break up things too much."

R. Price or evaluation preferences for small businesses.

A couple of interviewees reported that they were aware of price or evaluation preferences for small businesses. [Interviewees #: 10, 33, 48]. Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, said that "they will sometimes, on a solicitation, put an extra 10 points in for a local firm.... They do occasionally put in a DBE 5 percent if you meet your DBE goal in the original solicitation."

Interviewee #33, the Caucasian male president of an engineering firm, stated that he has not had direct experience with price or evaluation preferences for small business, but he said that he is aware of the use of the measure by ODOT.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that he has had direct experience with programs or initiatives providing price or evaluation

preferences for small businesses and that he secured work with ODOT because of a price or evaluation preference. Interviewee #48 stated that he was higher than the next lowest bidder but the small business points and preferences allowed the firm to be the successful bidder.

Other interviewees reported that they were not aware of any price or evaluation preferences for small businesses. [Interviewees #: 1, 3, 4, 5, 6, 7, 8, 9, 11, 17, 18, 19, 20, 21, 26, 28, 29, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, TA #1, TA #2, TA #3, TA #5, TA #6, TA #7, TA #9, TA #10]. Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, reported that, other than having a DBE designation, ODOT does not participate in price or evaluation preferences for small businesses or award points.

Interviewee TA #6, the president of a minority business development agency, stated that his clients have not had direct experience with price or evaluation preferences for small businesses and that he is not aware of any use of the measure by ODOT.

Some interviewees thought that price or evaluation preferences could be beneficial to small businesses. [Interviewees #: 2, 3, 4, 7, 9, 14, 20, 28, 29, 30, 31, 32, 33, 34, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, TA #2, TA #6, TA #7, TA #9, TA #10]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, said that providing price or evaluation preferences to small businesses "would be awesome." He also suggested implementing a policy under which, for example, contracts under \$50,000 would not require bonding, except for certain insurance requirements (general liability insurance and worker's compensation), which would then allow more DBE participation.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, said that as a taxpayer, he does not think that there should be price or evaluation preferences, but as a minority businessman, he does think that there should be price or evaluation preferences. He said that he leans more toward the conclusion that there should be price or evaluation preferences because he thinks the goals "are appropriate to provide a protected environment for maybe a short period of time, such as the 8(a) program does." "[I]n DOT there's not such a thing that I'm aware of, but I find it to be an appropriate concept that would make allowances for DBEs to perform and be allowed to perform at a higher price in recognition of their limited capacity to perform as efficiently because of their resource challenges."

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that she thinks price or evaluation preferences for small business would be helpful because small businesses cannot perform on the same level as large businesses and, because small businesses cannot order materials and supplies in quantities, they cannot get the best prices for materials and supplies.

Some interviewees did not think implementing price or evaluation preferences for small businesses would be beneficial. [Interviewees #: 6, 8, 17, TA #1]. Interviewee #6, the African American owner of a DBE-certified trucking company, said that he thought that implementing price or evaluation preferences for small businesses would be a bad idea. He added that he thought that the same requirements should apply to all contractors, and you should only bid on projects when you know you can meet the requirements.

Interviewee #8, the African American president and owner of a civil and structural engineering firm, said, "It would be hard for me to agree with that." He said that the lowest bid should win.

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, said that he would be against ODOT providing price or evaluation preferences for small businesses, and he was not aware of them doing this. He stated, "I want everybody to have the same opportunities."

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, said of price or evaluation preferences for small businesses, "I don't think that that would be fair." He said that he did not believe that if a small business got larger that they would want another small business to come in and have an advantage over them. He said that everyone should "start at the starting line fair and square ... and that means no points for the big guys either."

S. Small business set-asides.

Some interviewees reported that they were generally aware of small business set-asides. [Interviewees #: 5, 7, 13, 14, 27, 33, 36, 37, 38, 43, 46, TA #10]. Interviewee #5, the Caucasian male co-owner of a geotechnical engineering firm, said that he knows that these exist, but he does not know if they are set-asides for his type of work. He added, "They're mostly set-asides for construction businesses."

Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that the federal government does this.

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, said that he was aware of the 8(a) set-asides, which he experienced for nine years. He said that he also has knowledge ODOT's minority subcontracting goals and WBE goals. He stated that he does not have very much knowledge of it because he has not been there in a while, but he understands that they function in basically the same manner and that those goals vary from project to project.

Interviewee #33, the Caucasian male president of an engineering firm, reported that he has had direct experience with small business set-asides, and he is aware of the use of the measure by ODOT.

Interviewee #36, a Caucasian female senior engineer of an engineering firm, stated that she has had direct experience with programs providing small business set-asides on the federal level. Interviewee #36 stated that she is not aware of any use of the measure by ODOT.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that they are aware of the use of small business set-asides by ODOT on the sidewalk projects being built with stimulus money.

Some interviewees reported that they were not aware of any small business set-asides. [Interviewees #: 1, 2, 3, 4, 8, 9, 10, 11, 17, 18, 19, 20, 21, 26, 28, 29, 30, 31, 32, 34, 35, 39, 40, 41, 42, 44, 45, 47, 48, TA #1, TA #2, TA #5, TA #6, TA #7, TA #9]. Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses,

reported that he is aware of small business set-asides at the federal level but nothing else other than what ODOT does with the DBE Program.

Some interviewees thought that small business set-asides could be beneficial to small businesses. [Interviewees #: 2, 4, 5, 7, 8, 9, 12, 15, 20, 28, 29, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, TA #2, TA #3, TA #5, TA #6, TA #7, TA #9, TA #10]. Interviewee #8, the African American president and owner of a civil and structural engineering firm, said that this could "work to help develop businesses to the point where they could become mainstream" and be in complete control of the job. He said that he thinks that this could be a "building tool for smaller companies ... not unlike the 8(a) system with the federal government."

Interviewee #9, the African American owner of a non-certified trucking company, said, "that would most definitely help." He added, though, that he is not sure what you would consider a small business.

Interviewee #15, the Caucasian male co-owner and manager of an engineering firm, commented, "I don't have heartburn with it.... Things are changing, and I can see why. They needed to." He added, "In a perfect world, [the companies] would allot [a certain] amount and not be forced to."

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that she thinks small business set-asides would be "very" helpful for small businesses, including MBE/WBE/DBEs.

Interviewee #36, a Caucasian female senior engineer of an engineering firm, stated that small business set-asides would be helpful for small businesses, including MBE/WBE/DBEs. She commented that as a large business she does not like small business set-aside programs.

Some interviewees did not think implementing small business set-asides would be beneficial to small businesses. [Interviewees #: 6, 16, 17, 27, 33, TA #4]. Interviewee #6, the African American owner of a DBE-certified trucking company, said that he thought that this would be a bad idea. He added that he thought that the same requirements should apply to all contractors, and you should only bid on projects when you know you can meet the requirements.

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, said, "I'm not for set-asides.... I think it should be based on qualification."

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that he was not aware of ODOT implementing small business set-asides, and he was not in favor of that. He said, "I don't know why we can't just all be on the same field. If you can do the work and bid the job, you can go do it. I don't think there should be any preferential treatment."

Interviewee #27, the Caucasian female owner of a DBE-certified erosion control firm, stated that "we already have the set-asides so this might not be necessary."

Interviewee #33, the Caucasian male president of an engineering firm, said, "[Small business set-asides] should not exist."

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, reported that Oklahoma is a "very conservative" state. He said that the

State generally believes that "you pull up your boot straps, and you're successful based on your hard work and sweat, and set-asides are believed to be ... give-away programs, that you're giving somebody something that they have not earned. It is just not very popular ... with the elected officials."

T. Mandatory subcontracting minimums.

Some interviewees reported that they were aware of mandatory subcontracting minimums. [Interviewees #: 4, 7, 11, 17, 18, 19, 33, 36, 37, 38, 40, 42, 47, 48, TA #3, TA #10]. Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, reported that ODOT has mandatory subcontracting minimums, and he can obtain up to 49 percent of a contract as a subcontractor.

Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that the federal government does this, but he does not know if ODOT does this.

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, said "There is usually a requirement that a percentage of the subcontractors be DBE[s]." He stated that this requirement is not necessarily enforced.

Interviewee #11, represented by the male vice president and the female African American president and owner of a DBE-certified concrete company, said that usually the jobs in which he participates have no more than 5 percent of DBE participation on each particular job.

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that ODOT does this on a monthly basis, and a percentage of the job has to be performed by a minority.

Interviewee #18, the Caucasian male treasurer of a Caucasian male-owned heavy paving and grading construction firm, was not aware of minimums and said that ODOT has a "maximum."

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned bridge design engineering firm, said that mandatory subcontracting minimums are uncommon with engineering, but that he is aware of such requirements with contractors.

Interviewee #33, the Caucasian male president of an engineering firm, commented that he has not had direct experience with mandatory subcontracting minimums, but he has heard of it. Additionally, he mentioned that he is aware of the use of the measure by ODOT.

Interviewee #37, the African American male owner of an engineering firm, stated that he has had direct experience with mandatory subcontracting minimums. He stated that he believes that this is done by the Department of Defense and some federal government entities, but all are based on the SBA definition of small business. He said that he is not aware of any use of the measure by ODOT.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that he has had direct experience with mandatory subcontracting minimums, but he is not aware of any use of the measure by ODOT.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that she has had direct experience with mandatory subcontracting minimums, and she is aware that ODOT sets mandatory subcontracting minimums for using DBE firms.

Interviewee #47, the Caucasian female president of a WBE-certified trucking company, stated that she has had direct experience with mandatory subcontracting minimums but she does not believe that the subcontractors or minority contractors are actually getting to perform the work. Interviewee #47 stated that she is aware that ODOT has mandatory subcontracting minimums.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that he is aware that every federally-funded program has a DBE requirement for subcontracting, but he is not aware of ODOT having mandatory subcontracting goals.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that he is aware of mandatory subcontracting minimums being done with Title 6.

Some interviewees reported that they were not aware of mandatory subcontracting minimums. [Interviewees #: 1, 2, 3, 5, 8, 9, 10, 20, 21, 26, 27, 28, 29, 31, 32, 34, 35, 39, 41, 43, 44, 45, 46, TA #1, TA #2, TA #5, TA #6, TA #9]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, said that ODOT is supposed to have mandatory subcontracting minimums but they do not.

Interviewee TA #5, an organization providing outreach to Native American and other minorityowned businesses, reported that he was not aware of mandatory subcontracting minimums other than as it relates to ODOT goals.

Some interviewees thought that mandatory subcontracting minimums could be beneficial to small businesses. [Interviewees #: 3, 4, 7, 8, 9, 12, 16, 28, 29, 31, 33, 34, 35, 36, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, TA #2, TA #6, TA #9, TA #10]. Interviewee #8, the African American president and owner of a civil and structural engineering firm, said that this kind of program could be looked at as an apprenticeship, and that could be good if it were used in that matter, but to divide a prime contractor's job would be difficult, though it may work.

Interviewee #9, the African American owner of a non-certified trucking company, said that that would be helpful, but he was worried that the primes would simply subcontract to their friends.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm, stated that he is not aware of any use of the mandatory subcontracting minimums by ODOT but thinks it would be helpful for small businesses, including MBE/WBE/DBEs. Interviewee #34 stated, "[A mandatory subcontracting minimum] is exactly what needs to happen."

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that she thinks mandatory subcontracting minimums would help small businesses, including MBE/WBE/DBEs, but may limit what a prime contractor can do with their forces.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that mandatory subcontracting minimums sometimes help small business get portions of work and that she believes that they are helpful for small businesses, including MBE/WBE/DBEs.

Other interviewees reported that they did not think that mandatory subcontracting minimums would be helpful to small businesses or that they did not like the idea of mandatory subcontracting minimums. [Interviewees #: 6, 17, 32, TA #3, TA #4]. Interviewee #6 said that he thought that this would be a bad idea. He added, "That should be left up to the ... prime or the sub. If the prime has a job that he can do by himself, let him do it. If it's a job to where he wants to sub out to someone else, then that should be up to that company."

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that he does not agree with the imposition of mandatory subcontracting minimums. He stated that if you are a minority and can perform the whole job, "then so be it." But if it is his business, he said that he will have to subcontract out at least 10 percent of the project to a minority.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that he is aware of this being done with Title 6. He said that "there's already a law" that does this, and "we don't need any more laws;" he said that the State needs to enforce the laws we have.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, reported that Oklahoma is a "very conservative" state. He said that the State generally believes that "you pull up your boot straps, and you're successful based on your hard work and sweat," and mandatory subcontracting minimums are unacceptable to most people in the state and are thought of as give-aways.

U. Small business subcontracting goals.

Some interviewees reported that they were aware of small business subcontracting goals. [Interviewees #: 2, 4, 5, 7, 13, 21, 29, 36, 39, 42, 43, 46, 47, 48, TA #10]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, said that ODOT has DBE goals in place, but his firm has not received any work through these goals.

Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that ODOT and the City, since August 2009, have already implemented DBE goals.

Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that almost all Fortune 1000 companies do this instead of having mandatory set-asides.

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, said that he is aware of goals, but added, "Any goal program by a public agency without any kind of real enforcement is, to me, meaningless, but saying that, as far as I know, as far as strictly DBE, ODOT will tell you that they meet their goal every year. I think the issue ... is, what does that mean for African Americans, and I think they've been woefully behind, or African Americans have probably been underrepresented."

Interviewee #21, the Caucasian male general manager of a Caucasian male-owned bridge construction firm, said such measures exist, but that the goals vary from job to job.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that he is aware of sub-contracting goals existing through other programs but that he is not aware of ODOT setting sub-contracting goals other than the DBE goals.

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that she has had direct experience with small business subcontracting goals. She stated that she is aware ODOT has small business contracting goals, and that the City of Tulsa has minority and DBE requirements on almost every one of their contracts that are let.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that she has had direct experience with small business subcontracting goals, but believes the definition of "small businesses" matters. She added that she is aware of ODOT having small business contracting goals.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that they have had direct experience with small business subcontracting goals. Interviewee #43 stated that they are aware of ODOT having DBE subcontracting goals and stated, "The [ODOT small business subcontracting goals] are [not helpful]." Interviewee #43 stated, "The actual awards to minorities are less than 1 percent."

Other interviewees reported that they were not aware of any small business subcontracting goals. [Interviewees #: 1, 3, 8, 9, 10, 11, 17, 18, 19, 20, 26, 27, 28, 30, 31, 32, 33, 34, 35, 37, 38, 40, 41, 44, 45, TA #1, TA #2, TA #6, TA #9].

Some interviewees thought that small business subcontracting goals could be beneficial to small businesses. [Interviewees #: 4, 7, 8, 9, 16, 20, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 40, 41, 42, 43, 44, 45, 47, 48, TA #2, TA #6, TA #9, TA #10]. Interviewee #9, the African American owner of a non-certified trucking company, said that this would be helpful, "but if they can make them do it, there's probably a better chance of it happening."

Interviewee #33, the Caucasian male president of an engineering firm, said that although he believes small business subcontracting goals might be helpful for small businesses, including MBE/WBE/DBEs, he does not believe that they should exist.

Interviewee #35, the Native American female president of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated that she believes small business subcontracting goals would be helpful for small businesses, but she is unsure if it would beneficial for larger companies.

Some interviewees said that they did not like the idea of small business subcontracting goals or did not think that they would benefit small businesses. [Interviewees #: 1, 6, 46, TA #3, TA #4]. Interviewee #46, the African American male owner of a DBE-certified safety and environmental consulting firm, stated that he believes ODOT has goals but the goals have not been

helpful for his firm. He stated that if you are not required to achieve the goals there is no need to have them.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that he thinks the State should set mandatory quotas and not simply set goals.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, said that he does not think that anyone has a problem with goals, "but the problem is that if there is no mechanism to move the goal forward, then what's the point? Then, all you're doing is praying that the benevolency of the individuals involved will help make that happen." He said that he wishes that there was some way to reward or "provide something of value" to those who meet the goals.

V. Formal complaint / grievance procedures at the public agency.

Some interviewees reported that they were aware of current complaint and grievance procedures. [Interviewees #: 1, 3, 7, 9, 10, 19, 27, 29, 32, 33, 34, 35, 36, 37, 39, 42, 43, 46, 47, TA #1, TA #2, TA #3, TA #4, TA #6, TA #10]. Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that the federal government has one of these procedures.

Interviewee #9, the African American owner of a non-certified trucking company, said that he knows someone who "filed a grievance." He said that it may have worked a little bit because some of the people about whom he complained are giving him work now.

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, reported that there is a formal complaint and grievance procedure, "but nobody uses it. You can imagine why."

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned bridge design engineering firm, reported that he was aware of formal complaint and grievance procedures in place with ODOT, but he said that he was only familiar with the procedures relating to being denied a contract after getting shortlisted.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, reported that he is aware of ODOT having a formal complaint and grievance procedures in place, but he is not aware of how effective they are.

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that she is aware of formal grievance procedures existing, but she does not have any direct experience. She stated that she is aware that ODOT has measures in place for formal grievances, but it is not an easy process. She stated, "We can find step one, but we're not quite sure where to go to from there."

Interviewee #33, the Caucasian male president of an engineering firm, reported that he has not had direct experience with formal complaint and grievance procedures. However, he said that he is aware of the use of the measure by ODOT.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm, stated he is aware that ODOT has formal complaint and grievance procedures but "has not seen it in action."

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that she has not had any direct experience with programs or initiatives providing formal complaint or grievance procedures, but she is aware that ODOT has a formal complaint and grievance process and that agencies are supposed to have these procedures in place.

Interviewee #47, the Caucasian female president of a WBE-certified trucking company, stated that she has had direct experience with formal complaint and grievance procedures. She reported that she has utilized the process with the City of Tulsa. Interviewee #47 stated that she is not aware of any use of the measure by ODOT.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, said he was almost certain that ODOT has a formal complaint and grievance procedure in place.

Interviewee TA #2, the executive director of a Hispanic trade association, said that he is sure such procedures exist.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, said that he is aware that ODOT has these procedures and that his members have used them, though that process was not successful. He said that a member that used the process "got clarity on what he thought was a[n] issue of unfairness, and because of it, he found out otherwise, so it served its purpose."

Interviewee TA #6, the president of a minority business development agency, stated that his clients have had direct experience with the formal complaint and grievance procedures at public agencies and that he is aware of the use of the measure by ODOT.

Some interviewees reported that they were not aware of current complaint and grievance procedures at state agencies. [Interviewees #: 2, 4, 5, 8, 11, 13, 16, 17, 18, 20, 21, 26, 28, 30, 31, 38, 40, 41, 44, 45, 49, TA #9]. Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that he was sure that ODOT had formal complaint and grievance procedures, although he was not aware of it.

Interviewee #38, the Native American female president of an engineering firm, stated that she has not had any direct experience with programs or initiatives providing formal complaint and grievance procedures, but is sure they exist.

Some interviewees thought that the availability of formal complaint and grievance procedures at ODOT could be beneficial to small businesses. [Interviewees #: 2, 5, 7, 8, 9, 20, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 49, TA #1, TA #2, TA #3, TA #6, TA #9, TA #10]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, reported that he was not aware of any formal grievance procedures but said, "I would entertain that very much."

Interviewee #8, the African American president and owner of a civil and structural engineering firm, said, "There should be a way to report whether you have a good or a bad situation."

Interviewee #32, an employee of a Caucasian male-owned construction firm, stated that she does think formal complaint and grievance procedures would be "very" helpful for small businesses, including MBE/WBE/DBEs.

Interviewee #35, the Native American female president of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated that she believes assistance with formal complaint and grievance procedures would be helpful for small businesses. She stated that she is aware of ODOT having formal complaint and grievance procedures in place, but the procedures were not helpful because ODOT did not follow their own rules.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that she has doubts about how effective the procedures are based on how they are enforced, but that she believes formal complaint and grievance procedures would be helpful for small businesses, including MBE/WBE/DBEs.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, said that formal complaint and grievance procedures are good because the contractors should have the opportunity to bring issues to the attention of the agency if a problem arises.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that all agencies have mechanisms to file complaints, but they are not working. He suggested that whistleblowers be encouraged to step forward with problems by rewarding them. Interviewee TA #3 said that records should be kept and analyzed to see if they seem accurate or false.

Interviewee TA #6, the president of a minority business development agency, stated that he believes formal complaint and grievance procedures would be helpful for small businesses, including MBE/WBE/DBEs, but being helpful is relative to what is done with the complaint or grievance once it is filed. Interview #6 stated, "I would say, it's not helpful if nothing results." He added that he believes there needs to be some checks and balances. He stated that more needs to be done to monitor the responses to complaints and grievances.

Some interviewees reported that they did not think or were unsure of whether the implementation of formal complaint or grievance procedures would be beneficial to small businesses. [Interviewees #: 1, 4, 6, 17, 28, 33]. Interviewee #1, the Caucasian male chief financial officer of a Caucasian male-owned heavy highway and bridge construction firm, stated that there is a formal complaint and grievance procedure in place; he said it may or may not be helpful depending upon the grievance.

Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that a formal complaint procedure may or may not assist small businesses. He commented that if he were to complain about not receiving a job, ODOT or the prime contractor could just provide an excuse as to why his firm did not receive the job, such as that some other firm could do a better job.

Interviewee #6, the African American owner of a DBE-certified trucking company, said that he thinks that such procedures would not be helpful because everyone who is not awarded a job would have a grievance, and that would be a waste of time and money to "confirm or deny that the grievance is worth pursuing." He added, though, that a grievance procedure might be appropriate if the complainant "can show that negligence was done against ... their firm."

IX. Race-, ethnicity-, or gender-based measures.

Some interviewees reported a positive experience in connection with the State MBE/WBE and Federal DBE Programs. [Interviewees #: 1, 3, 4, 6, 7, 8, 11, 13, 15, 17, 18, 21, 27, 34, 35, 36, 37, 42, TA #1, TA #4]. Interviewee #1, the Caucasian male chief financial officer of a Caucasian male-owned heavy highway and bridge construction firm, stated that he believes that ODOT is doing as well as they can with respect to the DBE Program.

Interviewee #3, the Caucasian male president of a civil engineering firm, said that ODOT has a full-time staff person assigned to run the DBE Program. He stated that the DBE Program is "relatively new for the engineering side of things." He said that at the beginning he was "whining a bit," like the other engineering firms, because it took a percentage of their business away. But he said that it has worked out now, and "I look at everything as an opportunity." He said that his experience with the DBE Program has been "ultimately rewarding." He said that "I think they are doing a pretty good job to try to bring small businesses in; they are breaking the projects up, they have smaller projects typically, they are passing them around. I can honestly say all of this because I am hurting because of [my firm] being one of the large companies."

Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that, overall, he has had a very good experience with the DBE Program because he has been provided opportunities to work with the State.

Interviewee #6, the African American owner of a DBE-certified trucking company, shared that he thinks that "everything is fine the way it is" with the DBE Program. She said, "I don't want ODOT to make the process to become a DBE any easier." He added that if ODOT makes the project easier, "it makes [his] job more stressful and more competitive." He noted, though, that he does not "think [the process] should be any more difficult than what it is, but don't change it."

Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that he has had a "good experience" with the Federal DBE Program.

Interviewee #8, the African American president and owner of a civil and structural engineering firm, said that he thinks that ODOT has made a concerted effort at this point in time to ensure that everybody has a chance, and they will make it work.

Interviewee #11, represented by both the vice president and the African American president and owner of a DBE-certified concrete company, reported that the DBE Program has been helpful. He said that the program keeps the company up-to-date with what is going on, but the DBE Program cannot actually recommend the company for a particular job or tell the company what it takes to compete for the job. He said that program representatives provided some assistance with estimating and bidding, and showing the DBEs what paperwork to complete and how to complete it.

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, said that he has had a positive experience with the DBE Program. He commented that he thinks that the current goals are sufficient for ODOT, and no other measures are needed.

Interviewee #15, the Caucasian male co-owner and manager of an engineering firm, commented, "Everything's been just fine [with ODOT so far].... The personality through the phone is just outstanding."

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that he believes that ODOT does a "pretty good job of taking care of" availability and participation of small businesses.

Interviewee #18, the Caucasian male treasurer of a Caucasian male-owned heavy paving and grading construction firm, said that his company's experience with the DBE Program has been generally positive. He said that ODOT has done a good job with limited resources and this he is "a big fan."

Interviewee #21, the Caucasian male general manager of a Caucasian male-owned bridge construction firm, said that ODOT has done a good job with the DBE Program and has helped small businesses grow.

Interviewee #27, the Caucasian female owner of a DBE-certified erosion control firm, stated that once her firm received its certification, her experience has been good.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm, stated that his overall summary of his experience with DBE or State Programs is that the DBE firms he has hired as subcontractors do a good job and care more about the work. He stated, "The Federal DBE Program allows you to be a woman-owned business and still hire out the field work. That is what I believe ODOT should do."

Interviewee #35, the Native American female president of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated she thinks the DBE Program has been helpful.

Interviewee #36, a Caucasian female senior engineer of an engineering firm, stated that her past experience with DBEs or any state program is that the work performed by DBE firms has been comparable. She stated that she does not know much about the ODOT DBE Program and its implementation, but any requirements or stipulations for DBE participation do not bring about any hesitations other than finding the right DBE to do the work.

Interviewee #37, the African American male owner of an engineering firm, stated that the DBE Program with ODOT has been easy. He stated that at recertification time, ODOT simply visits his office, sends his reports and tries to help when they can.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that the DBE Program and other state programs are helpful to have

because the programs give opportunities to people. She added that such programs are necessary because people are not given opportunities because of their race, ethnicity, and gender.

Interviewee TA #1, the executive director of an association that provides lobbying, communication, and networking services to contractors, reported that he believes that the Federal DBE Program "is going well." He said that "in my almost three years here [with the association], I have not had anybody come and tell me that something is broke. They've said 'we know the requirements and we go out there and" try to find DBEs that they know and will perform quality work. Interviewee TA #1 said that he went to ODOT with a question about bonding for DBEs and "within two minutes" someone from ODOT had provided him with the requested information; "they are just amazingly responsive. . . I really enjoy working with them and I enjoy trying to help them out," including with their implementation of the Federal DBE Program. He cited the AGC's new payment plan to encourage DBE participation in his association (allowing DBEs to pay membership dues on a quarterly basis), but stated that no one has taken advantage of this opportunity so far.

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, said that as he becomes more familiar with the programs, he really likes the programs. He said, "I think the programs are very helpful to businesses. I think they can aid but maybe that's part of the problem," since that is just one component in a series of things that you need to do to be successful. He added, "Just because you now have that certification doesn't mean that the doors are now going to open and you're going to get every contract that comes through, and I'm afraid that that's the expectation of some of these individuals."

Some interviewees reported challenges in connection with State MBE/WBE and Federal DBE Programs. [Interviewees #: 4, 6, 7, 10, 11, 16, 17, 19, 29, 31, 32, 33, 35, 38, 41, 42, 43, 45, 46, 47, TA #2, TA #4, TA #5, TA #6, TA #8, TA #9]. Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that the work done by ODOT with its DBE Program and with other outside assistance has been helpful but is not sufficient.

Interviewee #6, the African American owner of a DBE-certified trucking company, said that ODOT's implementation of the Federal Program has been "fine." He said that he thinks that anyone certified as a DBE should have to go through the same paperwork.

Interviewee #7, the Native American owner of a federally-certified aerospace firm, reported that he has had problems with large businesses holding themselves out as small businesses.

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, reported that the documentation required for DBE certification has become much more detailed. He said, that the company last applied in 2002 and they gave up because they were told that "there was no way that they would certify us because I was [Caucasian]." Interviewee #10 added that race, gender, and firm size should not matter if they do the work and provide good service.

Interviewee #11, represented by both the vice president and the African American president and owner of a DBE-certified concrete company, said that he would like his firm to have Federal DBE certification because he believes that the certification will lead to more work.

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE-certified civil engineering firm, said, "There's a perception that 'DBE' means 'handout." He noted that DBEs are looked at differently, "like ... they are asking for a job without qualification or without capabilities." He commented, "You cannot legislate somebody's mind.... You can legislate the goals, but that's not going to bring the changes. It's a good try."

Interviewee #17, the Caucasian male president and former owner of a bridge construction firm, stated that he does "not like" the Federal DBE Program because it requires him to subcontract out some of his work. He stated that he should not have to subcontract out some of his work if he can perform the work himself and does not want to subcontract it out.

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned bridge design engineering firm, said that the owner of his firm had experience with the DBE Program but thought that it was not worth the amount of work it required.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that certification of fraudulent women-owned firms as DBEs is a big stumbling block, specifically in his industry. He recommended that an investigation be conducted to determine the true ownership and operation of all of the women-owned firms certified as DBE.

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated that she believes that the ODOT DBE Program divides people. She stated that the program efforts should focus on giving business information about opportunities. Interviewee #31 stated, "Capable companies should be able to bid and get work. Government programs encourage racism and discrimination by forcing programs that bring bias to the forefront."

Interviewee #32, an employee of a Caucasian male-owned construction firm, suggested that the owner or president of the firm should not have to be a woman for the firm to receive benefits of the WBE certification. She reported that she puts in just as many hours into the business as the owner, and perhaps the firm should get credit because she is a women manager.

Interviewee #33, the Caucasian male president of an engineering firm, reported that he has not had any experience with the DBE or any State Program, and he does not believe that the DBE Program should exist. He said that he has not had any experience with the Federal DBE Program and its implementation by ODOT. He continued by saying that he believes that all race, ethnicity, or gender-based programs should be eliminated along with the DBE Program. He added, "If you're qualified to do the work, you should be able to get the work."

Interviewee #35, the Caucasian vice president of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated that she believes the ODOT DBE office tries to assist the DBE firms but they are limited in what they are allowed to do. She stated that the ODOT DBE office is not allowed to follow their own rules and regulations and on more than one occasion the ODOT DBE office has said that their hands are tied. She stated that ODOT needs to follow their own rules and regulations.

Interviewee #38, the Native American female president of an engineering firm, stated that "If [ODOT doesn't] get this right it is just going to be a matter of time before its going to be a class-

action law suit [that] follows." Interviewee #38 stated the treatment of minorities in the State is awful, especially on the contracting level. She stated that contracting is worse for minorities with the State of Oklahoma than in other states. Interviewee #38 stated, "The ODOT score card is horrible."

Interviewee #41, the Hispanic male owner of a DBE-certified trucking firm, stated that he has not had any work generated because of the race, ethnicity, or gender-based programs, but he believes that the program's concept is good.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, reported that there is a problem with the different definitions and criteria for being a disadvantaged and small business. She stated that the different definitions create situations that meet the criteria for certification for some programs and not for others.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated, "Right now the DBE Program doesn't mean anything. It doesn't amount to anything." Interviewee #43 stated that the program is good, but there need to be people behind the program to make sure it is enforced and that the rules are adhered to. Interviewee #43 stated, "It is a good program. There is nothing wrong with it. That's how we got started." Interviewee #43 stated that when the DBE Program was first written it was a good program, but it has deviated and been manipulated from the intent of the program. Interviewee #43 stated, "The WBEs are taking over. The women-owned companies own the sod farms and many of the trucking companies and their husbands are the contractors. It's hard to overcome something like that."

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that DBE and State Programs should be enforced better. He stated that every year the agency reports that all DBE goals were met but he knows that that is incorrect. He stated that the reason for the DBE Program is to even the playing field because DBE firms are at a disadvantage, but the programs are not working. He stated, "Each year the DBE firms have to recertify, but how often do DBE firms come off the list because they outgrew [the DBE designation.]"

Interviewee #46, the African American male owner of a DBE-certified safety and environmental consulting firm, stated that there are pretty good measures in place but ODOT needs to act on them. He stated that he does not see any "teeth" in the DBE Program because he sees many projects without any DBE goals.

Interviewee #47, the Caucasian female president of a WBE-certified trucking company, stated that her experience with the Federal DBE Program and its implementation by ODOT has shown that the prime contractors have figured out the loopholes to keep from having to subcontract with DBE firms.

Interviewee TA #2, the executive director of a Hispanic trade association, reported that from the little bit that he has heard about the certification program, he understands it to be "very difficult" and "complicated" with "lots of paperwork."

Interviewee TA #4, the operations coordinator for a trade association providing economic business development assistance, reported that the organization's members that perform federal work really

like the Federal DBE Program. He stated that one of the organization's members "refuses to do any more work with the State because he just doesn't think it's worth it."

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, reported that his member's experiences with DBE Programs are varied. He said that becoming a DBE is frustrating, but once in the program, progress is based on performance. He reported his personal experience or exposure to the DBE certification process occurs when clients are rejected. He stated that the method in which ODOT administers the certification process makes him question their motives. He reported that he is aware of cases of delay and discrimination in ODOT's certification process. He suggested that ODOT administer the rule book with more awareness and sensitivity.

Interviewee TA #6, the president of a minority business development agency, stated that his clients' experience with the DBE or any State MBE/WBE Program is that they do not see a purpose to certification because they are not getting opportunities. Interviewee TA #6 stated that ODOT should "do better than what they are doing." He stated that in general, the State and ODOT could do a better job "spreading the wealth."

Interviewee TA #8, a program coordinator and a special program consultant for a minority trucking cooperative, stated that the reason minorities are not getting work with ODOT "is a direct result of the lack of a proactive behavior in the department."

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that his clients report that they can get certified much easier with other agency's MBE programs, such as the City of Tulsa, than with the ODOT DBE Program. He stated that the Federal DBE Program as implemented by ODOT needs to be improved so that it will actually provide increased opportunities for MBE firms as well as DBE firms. He stated that all programs need to address the bonding requirements that pose a "tremendous barrier' for MBE and DBE firms. He stated, "Until they develop a solution to the bonding issue, I can't see much change happening for MBE firms."

Other interviewees indicated a lack of knowledge regarding the State MBE/WBE and Federal DBE Programs. [Interviewees #: 1, 7, 9, 15, 16, 22, 29, 30, 31, 32, TA #6].

X. Recommendations.

Race-, ethnic-, and gender-neutral recommendations.

Some interviewees recommended that the State implement state-wide training programs and other measures to assist small businesses. [Interviewees #: 14, 15, 18, 19, TA #8, TA #9]. Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, said that some of his experiences with 8(a) have allowed him to see some things that may be good to adopt in ODOT too, such as mentor-protégé programs, a protected contract environment to allow a less-risky contract experience, and joint ventures.

Interviewee #15, the Caucasian male co-owner and manager of an engineering firm, suggested that the government should better publicize opportunities for tax credits and make them more easily available to small business.

Interviewee #18, the Caucasian male treasurer of a Caucasian male-owned heavy paving and grading construction firm, said that all prime contractors really need out of DBEs is for them to show up on time at the job and be competent. He said that training in construction methods would be very helpful.

Interviewee #19, the Caucasian male chief engineer of a Latino male-owned bridge design engineering firm, commented that he hoped that ODOT could put a program in place to facilitate "teamwork."

Interviewee TA #8, a program coordinator and a special program consultant for a minority trucking cooperative, said that the State should provide fundamental classes on how to develop and how to market the firm's business in a very basic, entry-level manner. Interviewee TA #8 stated that in the past, technical assistance workshops and speakers were too sophisticated for the target population. Interviewee TA #8 stated that ongoing, sustainable technical support is necessary and would be helpful. They said that "Firms don't know how to bid or estimate; they don't have Internet or websites and don't know how to submit bids online."

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that more networking events are needed with ODOT and the prime contractors. He stated that more proactive efforts are needed by ODOT staff and, more importantly, the prime contractors.

Some interviewees recommended that the State improve its communication within agencies and notification of work opportunities. [Interviewees #: 3, 4, 7, 8, 30, 31, 32, 39, TA #2]. Interviewee #3, the Caucasian male president of a civil engineering firm, recommended that ODOT take steps to enhance its inter-departmental communication.

Interviewee #4, the Hispanic male owner of a DBE-certified construction firm, stated that he receives phone calls about job opportunities from the State, and these outreach measures are very helpful to his firm. He stated that faxes and e-mails about job opportunities would also be helpful.

Interviewee #7, the Native American owner of a federally-certified aerospace firm, recommended that the State provide a database that identifies the needs of particular companies. He said that, otherwise, a lot of effort is involved in getting information concerning what opportunities are out there. He added that there needs to be more focus on training and workshops.

Interviewee #8, the African American president and owner of a civil and structural engineering firm, suggested that ODOT provide "a workshop once or twice a year to bring people in and make them aware of the different opportunities that are available with ODOT and the different tools that you can use to access the information that you need to know about jobs coming up or bids coming up."

Interviewee #30, the Caucasian male co-owner of a transportation firm, stated that more information on whom to contact when there were bid opportunities would enhance the availability and participation of small businesses. He stated that he recommends that ODOT provide more information about opportunities. Interviewee #30 stated, "If I knew who to contact to bid on jobs, it would really help."

Interviewee #31, the female vice president and secretary of a Caucasian male-owned asphalt paving and asphalt supply firm, stated that providing information about whom to contact regarding ODOT opportunities would be the biggest help for businesses in general.

Interviewee #32, an employee of a Caucasian male-owned construction firm, recommended that ODOT make full revisions to the website, better communicate with the public, and provide better responses to inquiries.

Interviewee #39, the Caucasian female contractor administrator of a Caucasian male-owned construction firm, stated that a new contractor orientation by ODOT introducing and detailing ODOT's procedures and expectations would be helpful.

Interviewee TA #2, the executive director of a Hispanic trade association, recommended that ODOT provide more outreach to the Hispanic community and that communications be bilingual.

Some interviewees suggested that the State improve aspects of the bidding process. [Interviewees #: 38, TA #8]. Interviewee #38, the Native American female president of an engineering firm, stated that after the bid process, firms should be debriefed to learn how to improve their bids to ensure they are more competitive and hopefully foster future contracts.

Interviewee TA #8, a program coordinator and a special program consultant for a minority trucking cooperative, stated that ODOT should review bids and qualifications on a purely objective basis. Interviewee TA #8 stated that this could be done by omitting company information identifiers and submitting the bid documents to a neutral party.

Some interviewees recommended that the State make work opportunities more accessible to small businesses. [Interviewees #: 7, 10, 11, 12, 13, 22, 33, 40, 44, 45, TA #6, TA #8, TA #9]. Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that the State should require prime contractors to use a certain percentage of small businesses.

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, said that ODOT should require small business set-asides.

Interviewee #11, represented by both the vice president and the African American president and owner of a DBE-certified concrete company, recommended that ODOT look at bonding for smaller contractors to do ODOT's jobs. He recommended that ODOT should have the prime carry the small contractor through. He also recommended federal funding and bonding for small businesses. He commented that small companies need the federal government to take a handle of something. He added that if they do not do something, then the small contractors will be out of business. He commented that the stimulus was supposed to help them, and it has not done anything. He recommended that the State use some of the ideas from the SBA to implement in the DBE Program. He said that the money is the major problem, and the small contractors need help.

Interviewee #12, the owner of a female-owned non-certified civil engineering and land surveying firm, commented, "It's so hard to get into the preferred lists ... the short lists ... despite the fact that you have a reputation." She added that the company keeps bidding on jobs for public agencies, but they do not hear anything. She said that the company has not received any feedback either. Interviewee #12 said that she thinks that this is due to the fact that the agencies have favorite

contractors with whom they like to work, and the bidding process is more of a formality, adding, "the same people get all the jobs all the time."

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, said that in some "governmental organizations, you'll have a group of ... managers within that organization that have certain spending authority (that does not require bidding)." He said that he is not aware if ODOT has something similar to this, but "If that could be implemented, that's another way that you can help small companies." He said that he would like to see such a program "widely used."

Interviewee #22, the Caucasian male owner of an aerial mapping firm, stated he has no current contracts with ODOT. He also reported that the current "paperwork requirements at ODOT continue to keep me from working for them as a prime."

Interviewee #33, the Caucasian male president of an engineering firm, said that ODOT should give more work to smaller firms. He said, "There should be a way for smaller firms to sometimes make the short list for interviews." He mentioned that ODOT could improve the selection process to allow for smaller firms to get work. He commented that small firms can get the work out faster than large firms on any size of project.

Interviewee #40, the Hispanic male owner of a formerly DBE-certified land and design surveying firm, stated that more work needs to be designated for not only DBE firms but also small businesses.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that smaller contracts would be helpful for small and minority businesses.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated ODOT should simplify the procedures, reduce the size of the contracts to allow small businesses to compete, and put set-asides for small businesses on all government projects.

Interviewee TA #6, the president of a minority business development agency, stated that smaller contract awards would help and enhance the participation of small businesses, including MBE/WBE/DBEs.

Interviewee TA #8, a program coordinator and a special program consultant for a minority trucking cooperative, stated that ODOT should focus on organizing and increasing MBE capacity to open up more opportunities to small business.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that smaller contract awards would increase the participation of small businesses, including MBE/WBE/DBEs. Interviewee TA #9 stated that there needs to be a demonstrated commitment by ODOT to growing minority and small businesses.

Some interviewees recommended that ODOT implement staffing changes. [Interviewees #: 24, 38, 44, TA #5]. Interviewee #24, the Caucasian male owner of a utilities construction firm, suggests that, based on his limited past experience, ODOT should look into the conduct and professionalism of their inspectors.

Interviewee #38, the Native American female president of an engineering firm, stated that the racial, cultural and gender make-up of management within ODOT responsible for making the decisions on contracting processes needs to be assessed. She also stated that the ODOT staff need training.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that ODOT needs to make a staffing change so that all staff will treat contractors fairly. They stated that ODOT should include some minority staff in-house to provide better service.

Interviewee TA #5, an organization providing outreach to Native American and other minority-owned businesses, suggested that ODOT not change the rulebook but administer the rulebook with more awareness and sensitivity. He also recommended "screening for the compliance people and reviewers to ensure they weren't blatantly prejudiced. Oklahoma has some serious problems."

Some interviewees suggested that the State improve payment processes within State agencies. [Interviewees #: 26, 32, 43]. Interviewee #26, a supervising manager of a Caucasian-owned construction firm, shared that his only recommendation for ODOT would be to try to speed up their pay process because he had heard from other firms that it was slow.

Interviewee #32, an employee of a Caucasian male-owned construction firm, recommended that the State come up with a guideline for closing out projects, because each resident engineer has their own opinion about how projects need to be closed out with no clear guideline as to what is required. She stated that project warranties do not go into effect until after ODOT completely closes out a job, and if ODOT takes two years to actually close out a job and disburse final payment, ODOT gets two years of free labor from the contractor until the warranties begin.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, said "ODOT needs to enforce a 10-day requirement for prime contractors to pay subcontractors."

Race-, ethnic, and gender-based recommendations.

Some interviewees recommended that the State simplify the certification process. [Interviewees #: 5, 10, 38]. Interviewee #5, the Caucasian male co-owner of a geotechnical engineering firm, recommended that the State make the qualification process simpler. He noted that the certification process is currently "long and drawn out."

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, said that if the company meets the certification requirements, they should certify the firm.

Interviewee #38, the Native American female president of an engineering firm, stated that there needs to be a streamlined process for administering DBE Programs.

Some interviewees recommended that the State provide greater oversight of the MBE/WBE and DBE Programs. [Interviewees #: 7, 9, 10, 13, 18, 29, 34, 37, 38, 41, 42, 45, 47, TA #3, TA #6, TA #9, TA #10]. Interviewee #7, the Native American owner of a federally-certified aerospace firm, said that ODOT should periodically check on to whom their primes are subcontracting work.

Interviewee #9, the African American owner of a non-certified trucking company, recommended that the State ensure that "the same [MBE/WBE/DBEs are] not getting the same work. Spread it out. Let some other people get some work."

Interviewee #10, the co-owners and a senior project engineer of a non-certified Hispanic-owned engineering firm, said, "If they're going to put quotas out there and they're going to run these programs," they need to enforce it. He said that they should also verify the information they receive because so much of what companies claim is not true, and the State should be more helpful in the process of qualifying for the various certifications.

Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, suggested that if the state has a goal, it should stick to it and not rely on the word of a contractor that the goal cannot be met. He said the State should tell the contractor to try harder. He suggested that the State audit a company's use of DBEs and ask the DBEs how the relationship went. He added that you do not want to penalize someone, but this is dealing with tax dollars, and you do not want people to have unfair access to the pie. He also recommended that ODOT make sure that the DBE subcontractors are being paid in a timely manner and are being treated fairly. He added, "If you're going to have a DBE Program, have the requisite enforcement."

Interviewee #18, the Caucasian male treasurer of a Caucasian male-owned heavy paving and grading construction firm, said that ODOT should continue to enforce the plans and specifications equally among all contractors. He said that they should be better about enforcing rules uniformly.

Interviewee #29, the African American male owner and operator of a DBE-certified trucking firm, stated that investigations need to be conducted into the validity of woman-owned trucking companies. He reported that he is aware of the large contractors setting their wives up in DBE trucking companies in order to meet the DBE goal by giving all the contracts to trucking companies owned by their wives.

Interviewee #34, the Caucasian male vice president of a Caucasian female-owned WBE-certified excavating firm stated that in order to enhance the availability and participation of small businesses, including MBE/WBE/DBEs, there needs to be follow-up to ensure that prime contractors that list DBE subcontractors actually use the DBE subcontractors and that primes do not use DBE firms temporarily and not call them back to complete the project.

Interviewee #37, the African American male owner of an engineering firm, stated that DBE goals and set-asides should be monitored and managed in order to utilize the people that are in the system to the greatest degree possible. He said that mandatory subcontracting with DBEs by primes should be required with proper monitoring and penalties for those firms that do not comply.

Interviewee #38, the Native American female president of an engineering firm, stated that small business subcontracting goals should somehow be mandated or incentives given to meet the stated goals, because there are no repercussions for not meeting the small business subcontracting goals.

Interviewee #41, the Hispanic male owner of a DBE-certified trucking firm, suggested to ODOT that when a firm is the low bidder on a project and agrees to perform the work, the firm should be made to complete the project and not be allowed to walk off the project.

Interviewee #42, the Native American female president and majority owner of a commercial utility construction firm, stated that there appear to be many firms working with ODOT that falsely get the DBE certification as well as firms that violate the program and somehow continue to work on ODOT projects. She said that it seems that firms often state that they use DBE firms but really are not and use shadow front companies that they created. She added that once certain firms were disbarred for this misbehavior, the same people opened another business doing the same work under another name and continued to secure ODOT projects. She reported that this has happened on more than one occasion.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that ODOT should enforce the DBE participation requirements.

Interviewee #47, the Caucasian female president of a WBE-certified trucking company, stated that ODOT needs to maintain communication with the DBE firms. Interviewee #47 stated that the main contractors should be required to document minority participation and ODOT should be required to contact the minority and women business subcontractor to verify the work has been performed. She stated that ODOT is relying on the prime contractors' word regarding their good faith efforts and the level of DBE participation.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, said that he would like to see minorities receive more work, and the programs need to be run more fairly by implementing follow-up procedures to see if contractors are really working as hard as they claim to find minority subcontractors. He noted that he has known of some contractors that have implemented programs on their own to hire more minority contractors, and he thinks that this shows that their heart is in the right place. He added that in areas in which there is no competitive bidding, the process is not well-executed. Interviewee TA #3 recommended that the State provide greater oversight of contractors and whether they are following the rules concerning hiring DBEs. He said that there should also be a punishment, such as not being awarded projects for a number of years, if they are not following the rules.

Interviewee TA #6, the president of a minority business development agency, stated that in the instance of DBE frauds or fronts, if a prime does not use the DBE firm included in the bid package, the prime contractor should have to pay. He also suggested that there should be some award to the MBE/WBE/DBE that was used to get the award.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that the heads of the federal and state agencies need to be committed to the programs and keep statistics by each DBE category in order to document which DBE categories are being under-served or under-represented in the contract awards.

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that there needs to be oversight implemented within all race-, ethnicity-, and gender-based programs to ensure that prime contractors are doing what is required with regard to the subcontractors. She stated that there should be some form of record-keeping to measure compliance. She stated that ODOT should implement a procedure to ensure that the same subcontractors do not continue to be the only subcontractors being utilized. She stated that there needs to be a method to ensure that more DBE-certified firms are actually getting work.

Some interviewees recommended that the State provide greater oversight of the treatment of MBE/WBE/DBEs by primes. [Interviewees #: 13, 14]. Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, noted, "It seems like ... when a DBE or a minority messes up or there's problems on a project that a DBE's on, then that problem gets amplified. You know, it's like, 'Oh, he's the worst contractor ever.' ... It takes them forever to overcome whatever stigma that was. Whereas if you have a larger firm, a majority firm, you hear about them messing up all the time, but ... they still get work." He added that for minority and DBE firms, "the culture of giving them a second chance is not there ... You almost have to be perfect the first time to get a second chance with ODOT." He commented, "If you're going to drag somebody through the mud for messing up, you need to drag everybody through the mud for messing up. Don't take great pleasure in dragging small DBE firms through the mud and make sure they stay in the mud."

Interviewee #14, the Native American male majority owner and president of a DBE-certified general contracting company, said that he thinks that it is important for the government to maintain oversight in the joint venture situation to prevent possible exploitation.

Some interviewees recommended that the State provide training programs and notification of work opportunities to MBE/WBE/DBEs. [Interviewees #: 35, 37, 47, TA #9, TA #10]. Interviewee #35, the Native American female president of an MBE/WBE/DBE-certified firm providing specialty services in the construction industry, stated that any and all information can be helpful to any small business and MBE/WBE/DBE firms and if the proper entities follow the rules and guidelines put forth, it would probably be more effective to everyone. Interviewee #35 stated, "I don't believe it is ODOT's job to have the jobs, and provide a category for minorities and disadvantaged businesses and try to train them as well." She stated that she believes ODOT should assist the AGC to provide assistance to the small businesses and DBE firms.

Interviewee #37, the African American male owner of an engineering firm, stated that he would recommend that ODOT "work with DBE firms who are trying to take their businesses to the next level and try to sustain them with work as opposed to the 'hit and miss' approach." He stated that ODOT should "work with people instead of working against them. I just think there has to be a change in attitudes."

Interviewee #47, the Caucasian female president of a WBE-certified trucking company, stated that ODOT should better notify DBE firms of work opportunities by sending out bid sheets every month. She stated that ODOT should maintain more contact with the minority and womenowned business to allow the firms to attempt to get work and submit bids.

Interviewee TA #9, the African American male coordinator for a business and economic development agency, stated that ODOT needs to hire some outside contractors and consultants to specifically work with helping DBE firms develop and grow. He stated that the outside contractors and consultants providing assistance to DBE firms, particularly MBE firms, need to make an assessment of each company, identify the technical areas where assistance is needed, and concentrate on and provide technical assistance in those areas.

Interviewee TA #10, the African American female business development specialist for a non-profit organization, stated that the ODOT DBE Program needs to offer training to DBE-certified firms. She stated that ODOT should focus on providing more specific technical assistance and training

regarding ODOT contracting specifications. She stated that there also needs to be a concentration on building better relationships between the primes and subcontractors.

Some interviewees recommended that the State provide more information concerning the opportunities with the DBE Program and the certification process, and create a committee for feedback from DBE Program participants. [Interviewees #: 9, 12, 38, 43]. Interviewee #9, the African American owner of a non-certified trucking company, recommended that the State better publicize the certification process and the value of certification because a lot of people do not even know about the program. He indicated that he has just learned about it, and he might already be registered if he had known.

Interviewee #12, the owner of a female-owned non-certified civil engineering and land surveying firm, said that "training and seminars on how to take advantage of [WBE certification] would be very helpful."

Interviewee #38, the Native American female president of an engineering firm, stated that small businesses, women-owned and minority-owned businesses, as taxpayers, should be on a committee to provide a report back to the State on how well the ODOT DBE Program performed.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated, "ODOT needs to have more seminars and training programs within the DBE Program for everybody."

Some interviewees recommended that the State encourage or require prime contractors to use MBE/WBE/DBE firms. [Interviewees #: 2, 16, 32, 44, TA #3, TA #8]. Interviewee #2, the Hispanic male owner of DBE-certified concrete paving firm, said that ODOT should "start working immediately with [DBEs] who have not been awarded any work in the past two to three years" and start awarding projects to them. He stated that he would like ODOT to hold a mandatory meeting for all of the DBEs and determine which DBEs are receiving the work, including whether the work is going to Caucasian female subcontractors who are affiliated with the general contractors. He said that ODOT should start awarding contracts to DBEs; "the problem is not going to go away."

Interviewee #16, the Asian American Indian president and owner of a formerly MBE/DBE certified civil engineering firm, suggested "Don't discriminate.... Give them their fair share based on their knowledge and capabilities — not just a handout." He noted, "If a DBE is qualified" and is not getting work because of his DBE status, the State should find a way to give that DBE "opportunity." He said that he thinks that if you are certified as a DBE with ODOT, you should have the opportunity to work with ODOT at some point. He commented that the government should provide a return for the effort put forth by companies who apply for and renew their certifications. He said that they have to fill out so many forms, and it would be nice to get some "return for the efforts." He added, "There are lots of capable people, small firms.... They can do better job than sometimes a bigger company." He said, "It will benefit the people. It will uplift their life too."

Interviewee #32, an employee of a Caucasian male-owned construction firm, suggested that giving financial incentives to prime contractor would be helpful to support the DBE Program and DBE company participation. She stated that the Tulsa International Airport has some strict guidelines on

the number of DBEs that are required to be used. Interviewee #32 stated that financial incentives built into contracts would be a big bonus for all concerned.

Interviewee #44, the African American male and female owners of a DBE-certified construction firm, stated that to enhance the availability and participation of minority business, there needs to be a set-aside program for African American contractors only with competitive bidding.

Interviewee TA #3, representing a bank that has provided financing to African American- and Hispanic-owned engineering and construction firms that work with ODOT, recommended that the State require contractors to use minority firms.

Interviewee TA #8, a program coordinator and a special program consultant for a minority trucking cooperative, stated that ODOT needs to create a culture of inclusion of MBEs from the top down. Interviewee TA #8 stated, "If [ODOT] said to the primes 'you will work with minority firms,' ODOT would be taken seriously among the prime contractors." They stated that "there is an opportunity here to use incentives to hire minority-owned firms just like there are incentives to hire veterans and incentives to complete projects on time."

Some interviewees recommended the continuation of projects with 'goals.' [Interviewees #: 13, 25, 38, 43, 45, 48]. Interviewee #13, the African American male president and co-owner of a DBE-certified structural and engineering firm, suggested that the State keep up a serious effort to apply DBE goals to design professionals. He noted that the ODOT project on which he is working does not even have a DBE goal.

Interviewee #25, the Hispanic male owner of a DBE-certified construction firm, recommends that the size of goals attached to ODOT contracts be raised to be more in line with surrounding states. He further stated that this "would be a great benefit to us and other DBEs."

Interviewee #38, the Native American female president of an engineering firm, stated that her firm goes out of its way to ensure that the DBE goals are met on their projects because it is important to them. Interviewee #38 stated that the State should be charged to also meet the stated goal versus it being considered just a suggestion.

Interviewee #43, the African American male and female owners of a DBE-certified construction firm specializing in erosion control, excavating, trucking and fencing, stated that ODOT needs to have separate goals for each DBE group.

Interviewee #45, the African American male owner of an MBE/DBE-certified trucking firm, stated that every individual project that has federal dollars should have a DBE goal included.

Interviewee #48, the Native American male president of a WBE-certified construction firm, stated that ODOT should increase the percentage of projects with DBE goals. She stated that the list of DBE firms has grown and therefore the proportion of projects with DBE goals should also increase.

APPENDIX J. Inventory of Neutral Programs

This appendix describes small business assistance and other race-neutral programs that are (a) currently employed by ODOT or (b) otherwise available in Oklahoma.

A. Small Business Assistance and Other Race-neutral Programs Currently Employed by ODOT

The study team reviewed the race- and gender-neutral efforts that ODOT has in place or is currently initiating. ODOT has implemented a number of race- and gender-neutral remedies to improve the success of small firms seeking ODOT work, including the following programs.

Networking breakfasts. ODOT hosts two networking breakfasts each year where prime contractors and DBE contractors have the opportunity to meet each other face-to-face. Each networking breakfast hosts a small group that includes six to eight majority-owned prime contractors and 10 to 15 DBEs. The event gives the DBE community an opportunity to introduce their businesses to the prime contractors in an intimate setting. The breakfast is coordinated by ODOT's supportive services coordinator and is held at a local hotel conference room.

DBEs are selected based on the industry of the primes that are expected to be present at the breakfast. Firms must be invited to attend.

Newsletters. ODOT prepares and distributes a quarterly DBE newsletter. The newsletter is sent to all DBEs and to resource centers such as the Oklahoma Small Business Development Centers (SBDCs) and the Oklahoma Bid Assistance Networks, the Association of General Contractors, and ODOT field offices. The newsletter has grown over time to a length of eight pages and includes articles related to DBE business development and management as well as information about bonding, accounting and doing business with primes. The newsletter is mailed and an electronic version is posted online. Contract opportunities are not listed in this newsletter.

Technical assistance. ODOT sponsors a variety of technical assistance for DBEs:

- ODOT partners with the SBDCs and Votec Career Centers to provide training on issues such as bidding, estimating, bonding, accounting and financing.
- ODOT periodically offers in-house classes in small groups or one-on-one about how to navigate the ODOT website or how to do business with ODOT.
- In addition, 15 DBEs are eligible for up to \$1,000 per year from ODOT to pay for assistance from an outside consultant.

ODOT promotes technical assistance opportunities in the DBE newsletter and at various ODOT breakfasts and conferences. Firms are also made aware of these services at the time of their certification.

ODOT reported that some DBEs take advantage of the specific training and that no DBE firms have used the \$1,000 technical assistance funding.

ODOT-sponsored DBE conference. ODOT hosts an annual DBE conference where speakers are invited to discuss issues relevant to DBEs, including bonding, accounting, and doing business with ODOT and prime contractors. Topics are selected based on a survey of DBE interests and inquiries. The conference includes a networking lunch where prime contractors and DBEs have the opportunity to interact with one another.

ODOT invites up to 100 entities, including DBE-certified firms and other minority- and womenowned firms. ODOT reported that approximately 50 minority businesses attend at least part of the conference each year.

Prompt payment. Prime contractors performing work for ODOT are required to pay all subcontractors for satisfactory performance of their contracts no later than thirty days after receipt of each progressive payment from ODOT. The prime contractor must also make a prompt return of retainage to the subcontractor within thirty days after the subcontractor's work is satisfactorily completed, whether or not the prime contractor's work is complete. Work is considered "satisfactorily completed" when:

- ODOT finds the work completed in accordance with the plans and specifications;
- Any required paperwork has been received and approved; and
- ODOT has determined the final quantities on the subcontractor's portion of the work.

Failure to comply with the prompt payment and return-of-retainage requirements may result in sanctions under the contract. Prompt payment complaints are kept and investigated by regulatory services and are maintained in an ODOT database.

Focus team. ODOT is currently working to coordinate a focus team for construction and professional services. The focus team will comprise DBE and non-DBE firms as well as ODOT staff to serve as an advisory board for the DBE program, identifying issues and barriers to the success of minority businesses. The advisory board will help develop recommendations to encourage the utilization of minority- and women-owned firms at ODOT.

B. Small Business Assistance and Other Race-neutral Programs Available in the Oklahoma Marketplace

In addition to the race- and gender-neutral measures ODOT currently has in place, there are a number of neutral programs that other public, private and non-profit organizations administer in Oklahoma. Figure J-1 below provides examples of those programs. Figure J-2 highlights small business assistance and other neutral programs offered by specific organizations in the Oklahoma marketplace.

Figure J-1. Examples of small business assistance and other neutral programs in Oklahoma

Neutral remedies	Examples in the local marketplace
Technical assistance	Technical assistance programs are readily available throughout Oklahoma. Programs primarily provide general information and assistance for business start-ups and growing businesses. Examples range from Small Business Development Centers that serve all groups to more targeted programs for minorities and women through minority chambers of commerce, focusing on business planning, marketing, training workshops and financial management. Other technical assistance providers focus on business advice and mentoring, like those services offered by the Service Corps of Retired Executives (SCORE) and the City of Tulsa Bridge Program. Technical assistance programs available in Oklahoma are not industry-specific.
Opportunity identification and bid assistance	Several programs provide assistance with identifying work opportunities and providing bid assistance in Oklahoma. For example, 17 of the 56 Oklahoma Career Tech Centers provide access to the Oklahoma Bid Assistance Network (OBAN), offering marketing and technical assistance to Oklahoma businesses interested in selling products and services to federal, state and local governments. Other programs, including the Urban League of Greater Oklahoma City and the Oklahoma Minority Supplier Development Council (OMSDC), provide procurement assistance and exposure to business opportunities.
Small business finance and capital assistance	Small business financing is available through several local agencies within Oklahoma. For example, low-interest loans for the start-up and expansion of small businesses are provided by the Community Action Agency of Oklahoma City. Other agencies like Rural Enterprises, Inc (REI), Oklahoma City Northeast, Inc. and the Minority Enterprise Small Business Investment Company (MESBIC) offer a variety of business lending programs with the help of federal and private funds. Examples of federally-funded and -managed finance programs include the USDOT Office of Small and Disadvantaged Business Short Term Lending Program for certified DBE firms and the Small Business Administration (SBA) guaranteed loans programs.
Bonding assistance	There are two programs that offer bonding assistance. The SBA Bond Guarantee Program provides bid, performance and payment bond guarantees for individual contracts. The USDOT Bonding Assistance Program also provides bonding assistance in the form of bonding fee cost reimbursements for DBEs performing transportation work. A number of different agencies provide training on how to obtain a bond, including the Greater Oklahoma City Hispanic Chamber of Commerce.
Networking and outreach	A number of agencies serve as advocates for small businesses working to sponsor focus sessions, seminars and networking events to highlight small businesses and encourage their use for government and private sector projects. Some local organizations facilitating this outreach and networking include the City of Tulsa Bridge Program, the Consortium for Minority Business Development and the minority chambers of commerce.
Business incubator	Several organizations throughout Oklahoma administer business incubator programs, offering entrepreneurial firms hands-on management assistance, shared office services, equipment and technology. Examples of local organizations that operate business incubators include The Greater Oklahoma City and Tulsa Hispanic Chambers of Commerce, The Greenwood Chamber of Commerce, and Rural Enterprises, Inc.

Source: BBC Research & Consulting.

Figure J-2.
Small business assistance and other neutral programs offered by Oklahoma organizations

Organization name	Advocacy/ outreach	Bidding assistance	Bonding assistance	Budgeting & financial management	Business Education	Business planning assistance	Business plan development assistance	Counseling	Contracting procurement assistance	Financial/ capital assistance	Management assistance	Marketing strategies & assistance	Mentor/protégé program	Personnel assistance	Quality control assistance	Business incubators
Capitol Chamber of Commerce	•															
City of Tulsa Bridge Program	-	-							-				-			
Community Action Agency				-	-	-	-	-		-						
Greater Tulsa Hispanic Chamber of Commerce	•	•				•	•	-			•	•		-	•	-
Greenwood Chamber of Commerce	•	•		•	-	-	•		•		-	-				•
Native American Business Enterprise Center	•	•							•			•			•	
Northside Chamber of Commerce	•	•		•		-	•		•		-	-				
OK Technology Centers-Business Assistance Network (OBAN)		•			•		•	•	•		•	•				
Oklahoma Business Incubator Association (OBIA)	•															
Oklahoma City Chamber of Commerce																
Oklahoma City Hispanic Chamber of Commerce	•			•	•			•			-	•			•	-
Oklahoma Consortium for Minority Business Development	-															
Oklahoma Department of Commerce																
Oklahoma Minority Supplier Development Council	-								•							
Oklahoma State Chamber of Commerce	•															
Rural Enterprises, Inc. (REI)	-									•						
Service Corp of Retired Executives (SCORE)	-							-								
Small Business Administration	•		-						•	-						
Small Business Development Centers				•												
South Oklahoma City Chamber of Commerce	-															
Urban League of Greater Oklahoma City	-			•		-	•	-			-	-				
Women's Business Center	•					-		-			-					

Source: BBC Research & Consulting.

BBC Research & Consulting

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APPENDIX K. Detailed Disparity Results

Figure K-1 (3 pages) Page 1 of 3

Figure K-	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Funding																			
All funding sources	×			x			x			x			x			x			x
Federal		x			x			x			x			x			х		
State			x			x			x			x			x			x	
Туре																			
Transportation construction and engineering	x	x	x							х	х	x							x
Construction				x	x	x							х	x	x				
Engineering							x	x	x							x	х	x	
Time Period																			
July 2004-June 2009	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	х	x	x
July 2004-Dec 2006																			
Jan 2007-June 2009																			
Contract role																			
Prime/Sub	x	x	x	x	x	x	x	x	x										
Prime										x	x	x	x	x	x	x	x	x	
Sub/supplier																			x
Region																			
Oklahoma	×	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	×
Northeast																			
Southeast																			
Central																			
Panhandle																			
Southwest																			
Small Contracts																			
Under \$5M																			
Under \$500k																			
Current and Potential DBEs																			

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Figure K-	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Funding																				
All funding sources			x			x			x			x			х			x		
Federal	х			х			x			x			x			x			х	
State		x			x			x			x			x			x			x
Туре																				
Transportation construction and engineering	x	x							x	x	х	x	x	x	х	x	x	x	x	×
Construction			x	х	x															
Engineering						x	x	x												
Time Period																				
July 2004-June 2009	x	x	x	х	x	x	x	x							х	x	x	x	x	×
July 2004-Dec 2006									х	x	х									
Jan 2007-June 2009												x	x	x						
Contract role																				
Prime/Sub									x	x	х	х	х	х	х	x	х	x	х	x
Prime																				
Sub/supplier	×	x	x	x	х	x	x	x												
Region																				
Oklahoma	x	x	x	х	x	x	x	x	x	x	х	х	x	x						
Northeast															x	x	x			
Southeast																		x	x	x
Central																				
Panhandle																				
Southwest																				
Small Contracts																				
Under \$5M																				
Under \$500k																				
Current and Potential DBEs																				

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Figure K-	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58
Funding																		
All funding sources	х			x			х			x			x					
Federal	İ	x			x			x			x			x		x	x	x
State	l		x			x			x			x			x			
Туре																		
Transportation construction and engineering	x	х	x	x	x	x	x	x	x							x		
Construction	l									x	x	x					x	
Engineering	1												x	x	x			x
Time Period																		
July 2004-June 2009	x	х	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
July 2004-Dec 2006	İ																	
Jan 2007-June 2009																		
Contract role																		
Prime/Sub	x	х	x	x	x	x	x	x	x							x	x	x
Prime	İ									x	x	х	x	x	x			
Sub/supplier																		
Region																		
Oklahoma	İ									x	x	х	x	x	x	x	x	x
Northeast	İ																	
Southeast	İ																	
Central	х	х	х															
Panhandle	İ			x	x	x												
Southwest	1						x	x	x									
Small Contracts																		
Under \$5M	İ									x	x	x						
Under \$500k	1												x	x	x			
Current and Potential DBEs																×	x	x

Figure K-2.
Funding: Federal and State
Type: Construction and Engineering
Time Period: July 1, 2004 - June 30, 2009
Region: Oklahoma
Role: Prime contractors, Subcontractors and Suppliers

		(a)	(b)	(c) Total dollars	(d) Actual utilization	(e) Utilization	(f) Difference	(g)
Firm ⁻	Гуре	Number of contracts (subcontracts)	Total dollars (thousands)	after Unknown MBE allocation (thousands)*	(column c / column c, row1) %	benchmark (availability) %	(column d - column e) %	Disparity index (d / e) x 100
(1)	All firms	7,988	\$3,303,726	\$3,303,726				
(2)	MBE/WBE	3,208	\$617,520	\$617,520	18.7	13.1	5.6	142.4
(3)	WBE	2,070	\$400,528	\$400,528	12.1	7.1	5.0	170.7
(4)	MBE	1,138	\$216,991	\$216,991	6.6	6.0	0.5	109.0
(5)	African American-owned	51	\$3,468	\$3,468	0.1	0.4	-0.3	25.9
(6)	Asian-Pacific American-owned	4	\$423	\$423	0.0	0.2	-0.2	6.2
(7)	Subcontinent Asian American-owned	12	\$701	\$701	0.0	0.1	-0.1	16.4
(8)	Hispanic American-owned	124	\$30,026	\$30,026	0.9	1.0	-0.1	90.5
(9)	Native American-owned	947	\$182,373	\$182,373	5.5	4.3	1.2	128.9
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	2,316	\$243,210	\$243,210	7.4			
(12)	Woman-owned DBE	1,436	\$119,883	\$119,883	3.6			
(13)	Minority-owned DBE	880	\$123,327	\$123,327	3.7			
(14)	African American-owned DBE	43	\$3,168	\$3,168	0.1			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	4	\$366	\$366	0.0			
(17)	Hispanic American-owned DBE	99	\$28,530	\$28,530	0.9			
(18)	Native American-owned DBE	734	\$91,263	\$91,263	2.8			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-3.
Funding: Federal
Type: Construction and Engineering
Time Period: July 1, 2004 - June 30, 2009
Region: Oklahoma
Role: Prime contractors, Subcontractors and Suppliers

		(a)	(b)	(c) Total dollars after Unknown	(d) Actual utilization (column c /	(e) Utilization benchmark	(f) Difference (column d -	(g)
Firm 7	- Гуре	contracts (subcontracts)	Total dollars (thousands)	MBE allocation (thousands)*	column c, row1) %	(availability)	column e) %	Disparity index (d / e) x 100
(1)	All firms	6,303	\$2,851,012	\$2,851,012				
(2)	MBE/WBE	2,768	\$533,072	\$533,072	18.7	12.7	6.0	147.1
(3)	WBE	1,806	\$360,430	\$360,430	12.6	7.0	5.6	180.5
(4)	MBE	962	\$172,641	\$172,641	6.1	5.7	0.3	106.1
(5)	African American-owned	49	\$3,440	\$3,440	0.1	0.4	-0.2	33.0
(6)	Asian-Pacific American-owned	4	\$423	\$423	0.0	0.2	-0.2	7.6
(7)	Subcontinent Asian American-owned	9	\$648	\$648	0.0	0.1	-0.1	18.3
(8)	Hispanic American-owned	114	\$28,845	\$28,845	1.0	0.9	0.1	111.7
(9)	Native American-owned	786	\$139,285	\$139,285	4.9	4.1	0.8	118.6
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	2,038	\$227,091	\$227,091	8.0			
(12)	Woman-owned DBE	1,262	\$112,385	\$112,385	3.9			
(13)	Minority-owned DBE	776	\$114,705	\$114,705	4.0			
(14)	African American-owned DBE	41	\$3,140	\$3,140	0.1			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	3	\$319	\$319	0.0			
(17)	Hispanic American-owned DBE	95	\$28,126	\$28,126	1.0			
(18)	Native American-owned DBE	637	\$83,120	\$83,120	2.9			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-4.
Funding: State
Type: Construction and Engineering
Time Period: July 1, 2004 - June 30, 2009
Region: Oklahoma
Role: Prime contractors, Subcontractors and Suppliers

		(a) Number of contracts	(b) Total dollars	(c) Total dollars after Unknown MBE allocation	(d) Actual utilization (column c / column c, row1)	(e) Utilization benchmark (availability)	(f) Difference (column d - column e)	(g) Disparity index
Firm ⁻	Type	(subcontracts)	(thousands)	(thousands)*	%	%	%	(d / e) x 100
(1)	All firms	1,685	\$452,714	\$452,714				
(2)	MBE/WBE	440	\$84,448	\$84,448	18.7	15.7	2.9	118.4
(3)	WBE	264	\$40,098	\$40,098	8.9	7.7	1.1	114.7
(4)	MBE	176	\$44,350	\$44,350	9.8	8.0	1.8	122.1
(5)	African American-owned	2	\$28	\$28	0.0	0.7	-0.6	0.9
(6)	Asian-Pacific American-owned	0	\$0	\$0	0.0	0.3	-0.3	0.0
(7)	Subcontinent Asian American-owned	3	\$53	\$53	0.0	0.2	-0.2	7.2
(8)	Hispanic American-owned	10	\$1,181	\$1,181	0.3	1.6	-1.4	16.0
(9)	Native American-owned	161	\$43,088	\$43,088	9.5	5.3	4.2	178.9
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	278	\$16,119	\$16,119	3.6			
(12)	Woman-owned DBE	174	\$7,497	\$7,497	1.7			
(13)	Minority-owned DBE	104	\$8,621	\$8,621	1.9			
(14)	African American-owned DBE	2	\$28	\$28	0.0			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	1	\$47	\$47	0.0			
(17)	Hispanic American-owned DBE	4	\$404	\$404	0.1			
(18)	Native American-owned DBE	97	\$8,143	\$8,143	1.8			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-5.
Funding: Federal and State
Type: Construction
Time Period: July 1, 2004 - June 30, 2009
Region: Oklahoma
Role: Prime contractors, Subcontractors and Suppliers

		(a) Number of contracts	(b)	(c) Total dollars after Unknown MBE allocation	(d) Actual utilization (column c / column c, row1)	(e) Utilization benchmark (availability)	(f) Difference (column d - column e)	(g) Disparity index
Firm 7	Гуре	(subcontracts)	(thousands)	(thousands)*	%	%	%	(d / e) x 100
(1)	All firms	7,293	\$3,126,605	\$3,126,605				
(2)	MBE/WBE	3,120	\$610,136	\$610,136	19.5	12.8	6.7	152.6
(3)	WBE	2,025	\$396,705	\$396,705	12.7	7.3	5.4	173.5
(4)	MBE	1,095	\$213,431	\$213,431	6.8	5.5	1.4	124.8
(5)	African American-owned	46	\$2,890	\$2,890	0.1	0.4	-0.3	24.6
(6)	Asian-Pacific American-owned	0	\$0	\$0	0.0	0.0	0.0	0.0
(7)	Subcontinent Asian American-owned	8	\$595	\$595	0.0	0.0	0.0	200+
(8)	Hispanic American-owned	112	\$28,970	\$28,970	0.9	1.0	0.0	95.8
(9)	Native American-owned	929	\$180,975	\$180,975	5.8	4.1	1.7	140.3
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	2,281	\$240,232	\$240,232	7.7			
(12)	Woman-owned DBE	1,418	\$118,047	\$118,047	3.8			
(13)	Minority-owned DBE	863	\$122,186	\$122,186	3.9			
(14)	African American-owned DBE	39	\$2,650	\$2,650	0.1			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	1	\$263	\$263	0.0			
(17)	Hispanic American-owned DBE	99	\$28,530	\$28,530	0.9			
(18)	Native American-owned DBE	724	\$90,742	\$90,742	2.9			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-6.
Funding: Federal
Type: Construction
Time Period: July 1, 2004 - June 30, 2009
Region: Oklahoma
Role: Prime contractors, Subcontractors and Suppliers

		(a) Number of contracts	(b) Total dollars	(c) Total dollars after Unknown MBE allocation	(d) Actual utilization (column c / column c, row1)	(e) Utilization benchmark (availability)	(f) Difference (column d - column e)	(g) Disparity index
Firm	Гуре	(subcontracts)	(thousands)	(thousands)*	%	%	%	(d / e) x 100
(1)	All firms	5,741	\$2,709,509	\$2,709,509				
(2)	MBE/WBE	2,693	\$527,469	\$527,469	19.5	12.4	7.1	157.2
(3)	WBE	1,765	\$357,296	\$357,296	13.2	7.2	6.0	183.0
(4)	MBE	928	\$170,173	\$170,173	6.3	5.2	1.1	121.3
(5)	African American-owned	44	\$2,863	\$2,863	0.1	0.3	-0.2	31.1
(6)	Asian-Pacific American-owned	0	\$0	\$0	0.0	0.0	0.0	0.0
(7)	Subcontinent Asian American-owned	7	\$592	\$592	0.0	0.0	0.0	200+
(8)	Hispanic American-owned	107	\$28,535	\$28,535	1.1	0.9	0.2	121.8
(9)	Native American-owned	770	\$138,183	\$138,183	5.1	4.0	1.1	128.5
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	2,009	\$224,866	\$224,866	8.3			
(12)	Woman-owned DBE	1,248	\$111,238	\$111,238	4.1			
(13)	Minority-owned DBE	761	\$113,628	\$113,628	4.2			
(14)	African American-owned DBE	37	\$2,623	\$2,623	0.1			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	1	\$263	\$263	0.0			
(17)	Hispanic American-owned DBE	95	\$28,126	\$28,126	1.0			
(18)	Native American-owned DBE	628	\$82,616	\$82,616	3.0			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-7.
Funding: State
Type: Construction
Time Period: July 1, 2004 - June 30, 2009
Region: Oklahoma
Role: Prime contractors, Subcontractors and Suppliers

		(a) Number of contracts	(b) Total dollars	(c) Total dollars after Unknown MBE allocation	(d) Actual utilization (column c / column c, row1)	(e) Utilization benchmark (availability)	(f) Difference (column d - column e)	(g) Disparity index
Firm 1	- Type	(subcontracts)	(thousands)	(thousands)*	%	%	%	(d / e) x 100
(1) A	All firms	1,552	\$417,096	\$417,096				
(2)	MBE/WBE	427	\$82,667	\$82,667	19.8	15.4	4.4	128.7
(3)	WBE	260	\$39,409	\$39,409	9.4	8.0	1.4	117.7
(4)	MBE	167	\$43,258	\$43,258	10.4	7.4	3.0	140.7
(5)	African American-owned	2	\$28	\$28	0.0	0.6	-0.6	1.1
(6)	Asian-Pacific American-owned	0	\$0	\$0	0.0	0.0	0.0	0.0
(7)	Subcontinent Asian American-owned	1	\$3	\$3	0.0	0.0	0.0	200+
(8)	Hispanic American-owned	5	\$435	\$435	0.1	1.6	-1.5	6.4
(9)	Native American-owned	159	\$42,792	\$42,792	10.3	5.1	5.1	199.9
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	272	\$15,366	\$15,366	3.7			
(12)	Woman-owned DBE	170	\$6,809	\$6,809	1.6			
(13)	Minority-owned DBE	102	\$8,557	\$8,557	2.1			
(14)	African American-owned DBE	2	\$28	\$28	0.0			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	0	\$0	\$0	0.0			
(17)	Hispanic American-owned DBE	4	\$404	\$404	0.1			
(18)	Native American-owned DBE	96	\$8,126	\$8,126	1.9			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-8.
Funding: Federal and State
Type: Engineering
Time Period: July 1, 2004 - June 30, 2009
Region: Oklahoma
Role: Prime contractors, Subcontractors and Suppliers

Firm 1	Tyne	(a) Number of contracts (subcontracts)	(b) Total dollars (thousands)	(c) Total dollars after Unknown MBE allocation (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
		,	,	•	76	70	,,,	(47 5) x 100
, ,	All firms	695	\$177,121	\$177,121				
(2)	MBE/WBE	88	\$7,384	\$7,384	4.2	19.2	-15.1	21.7
(3)	WBE	45	\$3,823	\$3,823	2.2	3.3	-1.2	64.5
(4)	MBE	43	\$3,561	\$3,561	2.0	15.9	-13.9	12.7
(5)	African American-owned	5	\$577	\$577	0.3	0.9	-0.6	35.3
(6)	Asian-Pacific American-owned	4	\$423	\$423	0.2	3.8	-3.6	6.3
(7)	Subcontinent Asian American-owned	4	\$105	\$105	0.1	2.4	-2.4	2.5
(8)	Hispanic American-owned	12	\$1,056	\$1,056	0.6	1.7	-1.1	35.9
(9)	Native American-owned	18	\$1,399	\$1,399	0.8	7.1	-6.3	11.2
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	35	\$2,977	\$2,977	1.7			
(12)	Woman-owned DBE	18	\$1,836	\$1,836	1.0			
(13)	Minority-owned DBE	17	\$1,141	\$1,141	0.6			
(14)	African American-owned DBE	4	\$518	\$518	0.3			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	3	\$103	\$103	0.1			
(17)	Hispanic American-owned DBE	0	\$0	\$0	0.0			
(18)	Native American-owned DBE	10	\$521	\$521	0.3			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-9.
Funding: Federal
Type: Engineering
Time Period: July 1, 2004 - June 30, 2009
Region: Oklahoma
Role: Prime contractors, Subcontractors and Suppliers

Firm 1	· · · · ·	(a) Number of contracts (subcontracts)	(b) Total dollars (thousands)	(c) Total dollars after Unknown MBE allocation (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
		,	,	•	70	70	70	(u / e) x 100
(1) A	All firms	562	\$141,503	\$141,503				
(2)	MBE/WBE	75	\$5,603	\$5,603	4.0	19.1	-15.1	20.8
(3)	WBE	41	\$3,135	\$3,135	2.2	3.1	-0.9	70.6
(4)	MBE	34	\$2,469	\$2,469	1.7	15.9	-14.2	11.0
(5)	African American-owned	5	\$577	\$577	0.4	0.9	-0.4	47.9
(6)	Asian-Pacific American-owned	4	\$423	\$423	0.3	3.9	-3.6	7.6
(7)	Subcontinent Asian American-owned	2	\$56	\$56	0.0	2.5	-2.5	1.6
(8)	Hispanic American-owned	7	\$311	\$311	0.2	1.7	-1.5	13.0
(9)	Native American-owned	16	\$1,102	\$1,102	0.8	7.0	-6.2	11.2
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	29	\$2,224	\$2,224	1.6			
(12)	Woman-owned DBE	14	\$1,147	\$1,147	0.8			
(13)	Minority-owned DBE	15	\$1,077	\$1,077	0.8			
(14)	African American-owned DBE	4	\$518	\$518	0.4			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	2	\$56	\$56	0.0			
(17)	Hispanic American-owned DBE	0	\$0	\$0	0.0			
(18)	Native American-owned DBE	9	\$504	\$504	0.4			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-10.
Funding: State
Type: Engineering
Time Period: July 1, 2004 - June 30, 2009
Region: Oklahoma
Role: Prime contractors, Subcontractors and Suppliers

Firm ⁻	Гуре	(a) Number of contracts (subcontracts)	(b) Total dollars (thousands)	(c) Total dollars after Unknown MBE allocation (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1)	All firms	133	\$35,618	\$35,618				
(2)	MBE/WBE	13	\$1,781	\$1,781	5.0	19.9	-14.9	25.1
(3)	WBE	4	\$689	\$689	1.9	4.2	-2.2	46.4
(4)	MBE	9	\$1,092	\$1,092	3.1	15.7	-12.6	19.5
(5)	African American-owned	0	\$0	\$0	0.0	1.2	-1.2	0.0
(6)	Asian-Pacific American-owned	0	\$0	\$0	0.0	3.4	-3.4	0.0
(7)	Subcontinent Asian American-owned	2	\$50	\$50	0.1	2.1	-1.9	6.8
(8)	Hispanic American-owned	5	\$745	\$745	2.1	1.6	0.5	134.6
(9)	Native American-owned	2	\$297	\$297	0.8	7.5	-6.7	11.1
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	6	\$753	\$753	2.1			
(12)	Woman-owned DBE	4	\$689	\$689	1.9			
(13)	Minority-owned DBE	2	\$64	\$64	0.2			
(14)	African American-owned DBE	0	\$0	\$0	0.0			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	1	\$47	\$47	0.1			
(17)	Hispanic American-owned DBE	0	\$0	\$0	0.0			
(18)	Native American-owned DBE	1	\$17	\$17	0.0			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-11.
Funding: Federal and State
Type: Construction and Engineering
Time Period: July 1, 2004 - June 30, 2009
Region: Oklahoma
Role: Prime contractors

		(a) Number of	(b)	(c) Total dollars after Unknown	(d) Actual utilization (column c /	(e) Utilization benchmark	(f) Difference (column d -	(g)
Firm ⁻	Гуре	contracts (subcontracts)	Total dollars (thousands)	MBE allocation (thousands)*	column c / column c, row1)	(availability)	column a - %	Disparity index (d / e) x 100
(1)	All firms	2,145	\$2,391,916	\$2,391,916				
(2)	MBE/WBE	374	\$321,102	\$321,102	13.4	9.9	3.5	135.8
(3)	WBE	192	\$235,076	\$235,076	9.8	5.5	4.4	180.2
(4)	МВЕ	182	\$86,026	\$86,026	3.6	4.4	-0.8	81.2
(5)	African American-owned	4	\$495	\$495	0.0	0.2	-0.2	9.2
(6)	Asian-Pacific American-owned	2	\$375	\$375	0.0	0.3	-0.3	5.9
(7)	Subcontinent Asian American-owned	0	\$0	\$0	0.0	0.2	-0.2	0.0
(8)	Hispanic American-owned	20	\$5,977	\$5,977	0.2	0.7	-0.4	37.8
(9)	Native American-owned	156	\$79,179	\$79,179	3.3	3.1	0.2	106.8
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	110	\$36,257	\$36,257	1.5			
(12)	Woman-owned DBE	14	\$2,553	\$2,553	0.1			
(13)	Minority-owned DBE	96	\$33,703	\$33,703	1.4			
(14)	African American-owned DBE	3	\$435	\$435	0.0			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	0	\$0	\$0	0.0			
(17)	Hispanic American-owned DBE	11	\$5,119	\$5,119	0.2			
(18)	Native American-owned DBE	82	\$28,149	\$28,149	1.2			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-12.
Funding: Federal
Type: Construction and Engineering
Time Period: July 1, 2004 - June 30, 2009
Region: Oklahoma
Role: Prime contractors

Firm 1	Гуре	(a) Number of contracts (subcontracts)	(b) Total dollars (thousands)	(c) Total dollars after Unknown MBE allocation (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1)	All firms	1,542	\$2,020,266	\$2,020,266				
(2)	MBE/WBE	288	\$254,596	\$254,596	12.6	9.2	3.4	137.7
(3)	WBE	162	\$205,209	\$205,209	10.2	5.2	4.9	194.7
(4)	MBE	126	\$49,387	\$49,387	2.4	3.9	-1.5	62.1
(5)	African American-owned	4	\$495	\$495	0.0	0.2	-0.1	15.1
(6)	Asian-Pacific American-owned	2	\$375	\$375	0.0	0.3	-0.2	7.1
(7)	Subcontinent Asian American-owned	0	\$0	\$0	0.0	0.2	-0.2	0.0
(8)	Hispanic American-owned	15	\$5,231	\$5,231	0.3	0.5	-0.3	49.6
(9)	Native American-owned	105	\$43,286	\$43,286	2.1	2.8	-0.7	76.1
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	100	\$30,596	\$30,596	1.5			
(12)	Woman-owned DBE	11	\$1,868	\$1,868	0.1			
(13)	Minority-owned DBE	89	\$28,728	\$28,728	1.4			
(14)	African American-owned DBE	3	\$435	\$435	0.0			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	0	\$0	\$0	0.0			
(17)	Hispanic American-owned DBE	11	\$5,119	\$5,119	0.3			
(18)	Native American-owned DBE	75	\$23,174	\$23,174	1.1			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-13.
Funding: State
Type: Construction and Engineering
Time Period: July 1, 2004 - June 30, 2009
Region: Oklahoma
Role: Prime contractors

Firm ⁻	Гуре	(a) Number of contracts (subcontracts)	(b) Total dollars (thousands)	(c) Total dollars after Unknown MBE allocation (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1)	All firms	603	\$371,651	\$371,651				
(2)	MBE/WBE	86	\$66,506	\$66,506	17.9	13.8	4.1	129.3
(3)	WBE	30	\$29,867	\$29,867	8.0	6.7	1.3	119.3
(4)	MBE	56	\$36,639	\$36,639	9.9	7.1	2.8	138.8
(5)	African American-owned	0	\$0	\$0	0.0	0.6	-0.6	0.0
(6)	Asian-Pacific American-owned	0	\$0	\$0	0.0	0.3	-0.3	0.0
(7)	Subcontinent Asian American-owned	0	\$0	\$0	0.0	0.2	-0.2	0.0
(8)	Hispanic American-owned	5	\$745	\$745	0.2	1.4	-1.2	14.1
(9)	Native American-owned	51	\$35,894	\$35,894	9.7	4.6	5.0	200+
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	10	\$5,660	\$5,660	1.5			
(12)	Woman-owned DBE	3	\$685	\$685	0.2			
(13)	Minority-owned DBE	7	\$4,975	\$4,975	1.3			
(14)	African American-owned DBE	0	\$0	\$0	0.0			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	0	\$0	\$0	0.0			
(17)	Hispanic American-owned DBE	0	\$0	\$0	0.0			
(18)	Native American-owned DBE	7	\$4,975	\$4,975	1.3			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-14.
Funding: Federal and State
Type: Construction
Time Period: July 1, 2004 - June 30, 2009
Region: Oklahoma
Role: Prime contractors

Firm ⁻	[vne	(a) Number of contracts (subcontracts)	(b) Total dollars (thousands)	(c) Total dollars after Unknown MBE allocation (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
	,,	,	,		~	,0	,,	(4 / 5 / 100
, ,	All firms	1,759	\$2,239,571	\$2,239,571				
(2)	MBE/WBE	334	\$315,505	\$315,505	14.1	9.3	4.8	151.8
(3)	WBE	174	\$231,842	\$231,842	10.4	5.7	4.7	182.6
(4)	MBE	160	\$83,663	\$83,663	3.7	3.6	0.1	103.4
(5)	African American-owned	0	\$0	\$0	0.0	0.2	-0.2	0.0
(6)	Asian-Pacific American-owned	0	\$0	\$0	0.0	0.0	0.0	100.0
(7)	Subcontinent Asian American-owned	0	\$0	\$0	0.0	0.0	0.0	100.0
(8)	Hispanic American-owned	11	\$5,119	\$5,119	0.2	0.6	-0.4	39.3
(9)	Native American-owned	149	\$78,544	\$78,544	3.5	2.9	0.7	122.9
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	95	\$33,992	\$33,992	1.5			
(12)	Woman-owned DBE	3	\$824	\$824	0.0			
(13)	Minority-owned DBE	92	\$33,168	\$33,168	1.5			
(14)	African American-owned DBE	0	\$0	\$0	0.0			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	0	\$0	\$0	0.0			
(17)	Hispanic American-owned DBE	11	\$5,119	\$5,119	0.2			
(18)	Native American-owned DBE	81	\$28,049	\$28,049	1.3			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-15.
Funding: Federal
Type: Construction
Time Period: July 1, 2004 - June 30, 2009
Region: Oklahoma
Role: Prime contractors

		(a)	(b)	(c) Total dollars after Unknown	(d) Actual utilization (column c /	(e) Utilization benchmark	(f) Difference (column d -	(g)
Firm ⁻	Гуре	contracts (subcontracts)	Total dollars (thousands)	MBE allocation (thousands)*	column c, row1)	(availability) %	column e) %	Disparity index (d / e) x 100
(1)	All firms	1,230	\$1,896,189	\$1,896,189				
(2)	MBE/WBE	257	\$250,709	\$250,709	13.2	8.5	4.7	154.9
(3)	WBE	147	\$202,660	\$202,660	10.7	5.4	5.3	197.5
(4)	MBE	110	\$48,049	\$48,049	2.5	3.1	-0.6	81.1
(5)	African American-owned	0	\$0	\$O	0.0	0.1	-0.1	0.0
(6)	Asian-Pacific American-owned	0	\$0	\$0	0.0	0.0	0.0	100.0
(7)	Subcontinent Asian American-owned	0	\$0	\$0	0.0	0.0	0.0	100.0
(8)	Hispanic American-owned	11	\$5,119	\$5,119	0.3	0.4	-0.2	61.8
(9)	Native American-owned	99	\$42,930	\$42,930	2.3	2.6	-0.3	88.1
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	88	\$29,017	\$29,017	1.5			
(12)	Woman-owned DBE	3	\$824	\$824	0.0			
(13)	Minority-owned DBE	85	\$28,193	\$28,193	1.5			
(14)	African American-owned DBE	0	\$0	\$0	0.0			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	0	\$0	\$0	0.0			
(17)	Hispanic American-owned DBE	11	\$5,119	\$5,119	0.3			
(18)	Native American-owned DBE	74	\$23,074	\$23,074	1.2			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-16.
Funding: State
Type: Construction
Time Period: July 1, 2004 - June 30, 2009
Region: Oklahoma
Role: Prime contractors

		(a) Number of	(b)	(c) Total dollars after Unknown	(d) Actual utilization (column c /	(e) Utilization benchmark	(f) Difference (column d -	(g)
Firm ⁻	Гуре	contracts (subcontracts)	Total dollars (thousands)	MBE allocation (thousands)*	column c, row1)	(availability)	column e) %	Disparity index (d / e) x 100
(1)	All firms	529	\$343,382	\$343,382				
(2)	MBE/WBE	77	\$64,796	\$64,796	18.9	13.4	5.5	140.9
(3)	WBE	27	\$29,182	\$29,182	8.5	7.1	1.4	119.8
(4)	MBE	50	\$35,614	\$35,614	10.4	6.3	4.1	164.6
(5)	African American-owned	0	\$0	\$0	0.0	0.5	-0.5	0.0
(6)	Asian-Pacific American-owned	0	\$0	\$0	0.0	0.0	0.0	100.0
(7)	Subcontinent Asian American-owned	0	\$0	\$0	0.0	0.0	0.0	100.0
(8)	Hispanic American-owned	0	\$0	\$0	0.0	1.4	-1.4	0.0
(9)	Native American-owned	50	\$35,614	\$35,614	10.4	4.4	6.0	200+
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	7	\$4,975	\$4,975	1.4			
(12)	Woman-owned DBE	0	\$0	\$0	0.0			
(13)	Minority-owned DBE	7	\$4,975	\$4,975	1.4			
(14)	African American-owned DBE	0	\$0	\$0	0.0			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	0	\$0	\$0	0.0			
(17)	Hispanic American-owned DBE	0	\$0	\$0	0.0			
(18)	Native American-owned DBE	7	\$4,975	\$4,975	1.4			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-17.
Funding: Federal and State
Type: Engineering
Time Period: July 1, 2004 - June 30, 2009
Region: Oklahoma
Role: Prime contractors

		(a) Number of	(b)	(c) Total dollars after Unknown	(d) Actual utilization (column c /	(e) Utilization benchmark	(f) Difference (column d -	(g)
Firm ⁻	Гуре	contracts (subcontracts)	Total dollars (thousands)	MBE allocation (thousands)*	column c, row1)	(availability)	column e) %	Disparity index (d / e) x 100
(1)	All firms	386	\$152,346	\$152,346				
(2)	MBE/WBE	40	\$5,597	\$5,597	3.7	18.7	-15.0	19.6
(3)	WBE	18	\$3,234	\$3,234	2.1	2.3	-0.1	93.5
(4)	MBE	22	\$2,363	\$2,363	1.6	16.4	-14.9	9.4
(5)	African American-owned	4	\$495	\$495	0.3	0.9	-0.6	34.9
(6)	Asian-Pacific American-owned	2	\$375	\$375	0.2	4.2	-3.9	5.9
(7)	Subcontinent Asian American-owned	0	\$0	\$0	0.0	2.8	-2.8	0.0
(8)	Hispanic American-owned	9	\$858	\$858	0.6	1.8	-1.3	30.8
(9)	Native American-owned	7	\$635	\$635	0.4	6.7	-6.3	6.2
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	15	\$2,264	\$2,264	1.5			
(12)	Woman-owned DBE	11	\$1,729	\$1,729	1.1			
(13)	Minority-owned DBE	4	\$535	\$535	0.4			
(14)	African American-owned DBE	3	\$435	\$435	0.3			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	0	\$0	\$0	0.0			
(17)	Hispanic American-owned DBE	0	\$0	\$0	0.0			
(18)	Native American-owned DBE	1	\$100	\$100	0.1			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-18.
Funding: Federal
Type: Engineering
Time Period: July 1, 2004 - June 30, 2009
Region: Oklahoma
Role: Prime contractors

		(a) Number of	(b)	(c) Total dollars after Unknown	(d) Actual utilization (column c /	(e) Utilization benchmark	(f) Difference (column d -	(g)
Firm ¹	Гуре	contracts (subcontracts)	Total dollars (thousands)	MBE allocation (thousands)*	column c, row1)	(availability)	column e) %	Disparity index (d / e) x 100
(1)	All firms	312	\$124,077	\$124,077				
(2)	MBE/WBE	31	\$3,887	\$3,887	3.1	18.6	-15.5	16.8
(3)	WBE	15	\$2,549	\$2,549	2.1	2.2	-0.2	91.5
(4)	MBE	16	\$1,338	\$1,338	1.1	16.3	-15.3	6.6
(5)	African American-owned	4	\$495	\$495	0.4	0.8	-0.4	47.2
(6)	Asian-Pacific American-owned	2	\$375	\$375	0.3	4.3	-4.0	7.1
(7)	Subcontinent Asian American-owned	0	\$0	\$0	0.0	2.9	-2.9	0.0
(8)	Hispanic American-owned	4	\$112	\$112	0.1	1.8	-1.7	5.0
(9)	Native American-owned	6	\$355	\$355	0.3	6.6	-6.3	4.4
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	12	\$1,579	\$1,579	1.3			
(12)	Woman-owned DBE	8	\$1,044	\$1,044	0.8			
(13)	Minority-owned DBE	4	\$535	\$535	0.4			
(14)	African American-owned DBE	3	\$435	\$435	0.4			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	0	\$0	\$0	0.0			
(17)	Hispanic American-owned DBE	0	\$0	\$0	0.0			
(18)	Native American-owned DBE	1	\$100	\$100	0.1			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-19.
Funding: State
Type: Engineering
Time Period: July 1, 2004 - June 30, 2009
Region: Oklahoma
Role: Prime contractors

		(a) Number of	(b)	(c) Total dollars after Unknown	(d) Actual utilization (column c /	(e) Utilization benchmark	(f) Difference (column d -	(g)
Firm ⁻	Гуре	contracts (subcontracts)	Total dollars (thousands)	MBE allocation (thousands)*	column c, row1)	(availability)	column e) %	Disparity index (d / e) x 100
(1)	All firms	74	\$28,269	\$28,269				
(2)	MBE/WBE	9	\$1,710	\$1,710	6.0	19.3	-13.2	31.4
(3)	WBE	3	\$685	\$685	2.4	2.4	0.0	101.9
(4)	MBE	6	\$1,025	\$1,025	3.6	16.9	-13.3	21.5
(5)	African American-owned	0	\$0	\$0	0.0	1.3	-1.3	0.0
(6)	Asian-Pacific American-owned	0	\$0	\$0	0.0	3.8	-3.8	0.0
(7)	Subcontinent Asian American-owned	0	\$0	\$0	0.0	2.6	-2.6	0.0
(8)	Hispanic American-owned	5	\$745	\$745	2.6	1.9	0.8	140.0
(9)	Native American-owned	1	\$280	\$280	1.0	7.3	-6.3	13.6
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	3	\$685	\$685	2.4			
(12)	Woman-owned DBE	3	\$685	\$685	2.4			
(13)	Minority-owned DBE	0	\$0	\$0	0.0			
(14)	African American-owned DBE	0	\$0	\$0	0.0			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	0	\$0	\$0	0.0			
(17)	Hispanic American-owned DBE	0	\$0	\$0	0.0			
(18)	Native American-owned DBE	0	\$0	\$0	0.0			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-20.
Funding: State
Type: Construction and Engineering
Time Period: July 1, 2004 - June 30, 2009
Region: Oklahoma
Role: Subcontractors and Suppliers

Firm ⁻	Type	(a) Number of contracts (subcontracts)	(b) Total dollars (thousands)	(c) Total dollars after Unknown MBE allocation (thousands)*	(d) Actual utilization (column c / column c, row1)	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
	All firms	5,843	\$911,809	\$911,809				(2,7,2,7,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2
, ,		·	,	,	22.5	21.6	10.0	150.2
(2)	MBE/WBE	2,834	\$296,417	\$296,417	32.5	21.6	10.9	150.2
(3)	WBE	1,878	\$165,452	\$165,452	18.1	11.4	6.7	158.8
(4)	MBE	956	\$130,965	\$130,965	14.4	10.2	4.1	140.6
(5)	African American-owned	47	\$2,973	\$2,973	0.3	0.9	-0.6	37.1
(6)	Asian-Pacific American-owned	2	\$48	\$48	0.0	0.0	0.0	11.1
(7)	Subcontinent Asian American-owned	12	\$701	\$701	0.1	0.0	0.1	200+
(8)	Hispanic American-owned	104	\$24,049	\$24,049	2.6	1.9	0.7	138.4
(9)	Native American-owned	791	\$103,194	\$103,194	11.3	7.4	3.9	153.2
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	2,206	\$206,953	\$206,953	22.7			
(12)	Woman-owned DBE	1,422	\$117,330	\$117,330	12.9			
(13)	Minority-owned DBE	784	\$89,623	\$89,623	9.8			
(14)	African American-owned DBE	40	\$2,732	\$2,732	0.3			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	4	\$366	\$366	0.0			
(17)	Hispanic American-owned DBE	88	\$23,411	\$23,411	2.6			
(18)	Native American-owned DBE	652	\$63,114	\$63,114	6.9			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-21.
Funding: Federal
Type: Construction and Engineering
Time Period: July 1, 2004 - June 30, 2009
Region: Oklahoma
Role: Subcontractors and Suppliers

		(a) Number of contracts	(b) Total dollars	(c) Total dollars after Unknown MBE allocation	(d) Actual utilization (column c / column c, row1)	(e) Utilization benchmark (availability)	(f) Difference (column d - column e)	(g) Disparity index
Firm 7	уре	(subcontracts)	(thousands)	(thousands)*	%	%	%	(d / e) x 100
(1)	All firms	4,761	\$830,746	\$830,746				
(2)	MBE/WBE	2,480	\$278,475	\$278,475	33.5	21.4	12.2	156.9
(3)	WBE	1,644	\$155,221	\$155,221	18.7	11.3	7.3	164.7
(4)	MBE	836	\$123,254	\$123,254	14.8	10.0	4.8	148.1
(5)	African American-owned	45	\$2,945	\$2,945	0.4	0.9	-0.5	41.2
(6)	Asian-Pacific American-owned	2	\$48	\$48	0.0	0.0	0.0	16.3
(7)	Subcontinent Asian American-owned	9	\$648	\$648	0.1	0.0	0.1	200+
(8)	Hispanic American-owned	99	\$23,614	\$23,614	2.8	1.8	1.0	154.5
(9)	Native American-owned	681	\$95,999	\$95,999	11.6	7.3	4.3	158.6
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	1,938	\$196,494	\$196,494	23.7			
(12)	Woman-owned DBE	1,251	\$110,517	\$110,51 <i>7</i>	13.3			
(13)	Minority-owned DBE	687	\$85,977	\$85,977	10.3			
(14)	African American-owned DBE	38	\$2,705	\$2,705	0.3			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	3	\$319	\$319	0.0			
(17)	Hispanic American-owned DBE	84	\$23,007	\$23,007	2.8			
(18)	Native American-owned DBE	562	\$59,946	\$59,946	7.2			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-22.
Funding: State
Type: Construction and Engineering
Time Period: July 1, 2004 - June 30, 2009
Region: Oklahoma
Role: Subcontractors and Suppliers

		(a) Number of contracts	(b) Total dollars	(c) Total dollars after Unknown MBE allocation	(d) Actual utilization (column c / column c, row1)	(e) Utilization benchmark (availability)	(f) Difference (column d - column e)	(g) Disparity index
Firm 7	уре	(subcontracts)	(thousands)	(thousands)*	%	%	%	(d / e) x 100
(1) A	All firms	1,082	\$81,063	\$81,063				
(2)	MBE/WBE	354	\$17,942	\$17,942	22.1	24.5	-2.4	90.3
(3)	WBE	234	\$10,231	\$10,231	12.6	12.3	0.4	103.0
(4)	MBE	120	\$7,711	\$7,711	9.5	12.2	-2.7	77.7
(5)	African American-owned	2	\$28	\$28	0.0	1.1	-1.0	3.2
(6)	Asian-Pacific American-owned	0	\$0	\$0	0.0	0.2	-0.2	0.0
(7)	Subcontinent Asian American-owned	3	\$53	\$53	0.1	0.0	0.1	200+
(8)	Hispanic American-owned	5	\$435	\$435	0.5	2.6	-2.0	20.8
(9)	Native American-owned	110	\$7,195	\$7,195	8.9	8.4	0.4	105.2
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	268	\$10,459	\$10,459	12.9			
(12)	Woman-owned DBE	171	\$6,812	\$6,812	8.4			
(13)	Minority-owned DBE	97	\$3,646	\$3,646	4.5			
(14)	African American-owned DBE	2	\$28	\$28	0.0			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	1	\$47	\$47	0.1			
(17)	Hispanic American-owned DBE	4	\$404	\$404	0.5			
(18)	Native American-owned DBE	90	\$3,168	\$3,168	3.9			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-23.
Funding: Federal and State
Type: Construction
Time Period: July 1, 2004 - June 30, 2009
Region: Oklahoma
Role: Subcontractors and Suppliers

Firm ⁻	Гуре	(a) Number of contracts (subcontracts)	(b) Total dollars (thousands)	(c) Total dollars after Unknown MBE allocation (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1)	All firms	5,534	\$887,034	\$887,034				
(2)	MBE/WBE	2,786	\$294,631	\$294,631	33.2	21.6	11.6	153.6
(3)	WBE	1,851	\$164,863	\$164,863	18.6	11.5	7.1	162.0
(4)	MBE	935	\$129,768	\$129,768	14.6	10.2	4.5	144.0
(5)	African American-owned	46	\$2,890	\$2,890	0.3	0.9	-0.6	37.1
(6)	Asian-Pacific American-owned	0	\$0	\$0	0.0	0.0	0.0	0.0
(7)	Subcontinent Asian American-owned	8	\$595	\$595	0.1	0.0	0.1	200+
(8)	Hispanic American-owned	101	\$23,851	\$23,851	2.7	1.9	0.7	138.5
(9)	Native American-owned	780	\$102,431	\$102,431	11.5	7.3	4.2	157.5
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	2,186	\$206,240	\$206,240	23.3			
(12)	Woman-owned DBE	1,415	\$117,222	\$117,222	13.2			
(13)	Minority-owned DBE	771	\$89,018	\$89,018	10.0			
(14)	African American-owned DBE	39	\$2,650	\$2,650	0.3			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	1	\$263	\$263	0.0			
(17)	Hispanic American-owned DBE	88	\$23,411	\$23,411	2.6			
(18)	Native American-owned DBE	643	\$62,693	\$62,693	7.1			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-24.
Funding: Federal
Type: Construction
Time Period: July 1, 2004 - June 30, 2009
Region: Oklahoma
Role: Subcontractors and Suppliers

		(a) Number of contracts	(b)	(c) Total dollars after Unknown MBE allocation	(d) Actual utilization (column c / column c, row1)	(e) Utilization benchmark (availability)	(f) Difference (column d - column e)	(g) Disparity index
Firm ⁻	Гуре	(subcontracts)	(thousands)	(thousands)*	%	%	%	(d / e) x 100
(1)	All firms	4,511	\$813,320	\$813,320				
(2)	MBE/WBE	2,436	\$276,759	\$276,759	34.0	21.3	12.7	159.4
(3)	WBE	1,618	\$154,636	\$154,636	19.0	11.4	7.6	167.0
(4)	MBE	818	\$122,124	\$122,124	15.0	10.0	5.1	150.8
(5)	African American-owned	44	\$2,863	\$2,863	0.4	0.9	-0.5	41.0
(6)	Asian-Pacific American-owned	0	\$0	\$0	0.0	0.0	0.0	0.0
(7)	Subcontinent Asian American-owned	7	\$592	\$592	0.1	0.0	0.1	200+
(8)	Hispanic American-owned	96	\$23,416	\$23,416	2.9	1.9	1.0	154.5
(9)	Native American-owned	671	\$95,253	\$95,253	11.7	7.2	4.5	162.0
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	1,921	\$195,849	\$195,849	24.1			
(12)	Woman-owned DBE	1,245	\$110,414	\$110,414	13.6			
(13)	Minority-owned DBE	676	\$85,435	\$85,435	10.5			
(14)	African American-owned DBE	37	\$2,623	\$2,623	0.3			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	1	\$263	\$263	0.0			
(17)	Hispanic American-owned DBE	84	\$23,007	\$23,007	2.8			
(18)	Native American-owned DBE	554	\$59,542	\$59,542	7.3			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-25.
Funding: State
Type: Construction
Time Period: July 1, 2004 - June 30, 2009
Region: Oklahoma
Role: Subcontractors and Suppliers

Firm ⁻	⁻ уре	(a) Number of contracts (subcontracts)	(b) Total dollars (thousands)	(c) Total dollars after Unknown MBE allocation (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1)	All firms	1,023	\$73,714	\$73,714				
(2)	MBE/WBE	350	\$17,871	\$17,871	24.2	24.7	-0.5	98.0
(3)	WBE	233	\$10,227	\$10,227	13.9	12.4	1.5	112.1
(4)	МВЕ	117	\$7,644	\$7,644	10.4	12.4	-2.0	84.0
(5)	African American-owned	2	\$28	\$28	0.0	1.1	-1.0	3.5
(6)	Asian-Pacific American-owned	0	\$0	\$0	0.0	0.0	0.0	0.0
(7)	Subcontinent Asian American-owned	1	\$3	\$3	0.0	0.0	0.0	200+
(8)	Hispanic American-owned	5	\$435	\$435	0.6	2.8	-2.2	21.0
(9)	Native American-owned	109	\$7,178	\$7,178	9.7	8.5	1.3	115.1
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	265	\$10,391	\$10,391	14.1			
(12)	Woman-owned DBE	170	\$6,809	\$6,809	9.2			
(13)	Minority-owned DBE	95	\$3,582	\$3,582	4.9			
(14)	African American-owned DBE	2	\$28	\$28	0.0			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	0	\$0	\$0	0.0			
(17)	Hispanic American-owned DBE	4	\$404	\$404	0.5			
(18)	Native American-owned DBE	89	\$3,151	\$3,151	4.3			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-26.
Funding: Federal and State
Type: Engineering
Time Period: July 1, 2004 - June 30, 2009
Region: Oklahoma
Role: Subcontractors and Suppliers

		(a) Number of contracts	(b) Total dollars	(c) Total dollars after Unknown MBE allocation	(d) Actual utilization (column c / column c, row1)	(e) Utilization benchmark (availability)	(f) Difference (column d - column e)	(g) Disparity index
Firm ⁻	Гуре	(subcontracts)	(thousands)	(thousands)*	%	%	%	(d / e) x 100
(1)	All firms	309	\$24,775	\$24,775				
(2)	MBE/WBE	48	\$1,787	\$1,787	7.2	22.4	-15.2	32.2
(3)	WBE	27	\$589	\$589	2.4	10.0	-7.6	23.9
(4)	MBE	21	\$1,197	\$1,197	4.8	12.4	-7.6	38.9
(5)	African American-owned	1	\$82	\$82	0.3	0.9	-0.5	37.7
(6)	Asian-Pacific American-owned	2	\$48	\$48	0.2	1.5	-1.3	12.7
(7)	Subcontinent Asian American-owned	4	\$105	\$105	0.4	0.0	0.4	200+
(8)	Hispanic American-owned	3	\$198	\$198	0.8	0.6	0.2	129.7
(9)	Native American-owned	11	\$764	\$764	3.1	9.4	-6.3	32.8
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	20	\$713	\$713	2.9			
(12)	Woman-owned DBE	7	\$107	\$107	0.4			
(13)	Minority-owned DBE	13	\$606	\$606	2.4			
(14)	African American-owned DBE	1	\$82	\$82	0.3			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	3	\$103	\$103	0.4			
(17)	Hispanic American-owned DBE	0	\$0	\$0	0.0			
(18)	Native American-owned DBE	9	\$421	\$421	1.7			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-27.
Funding: Federal
Type: Engineering
Time Period: July 1, 2004 - June 30, 2009
Region: Oklahoma
Role: Subcontractors and Suppliers

Firm 1	Vpe	(a) Number of contracts (subcontracts)	(b) Total dollars (thousands)	(c) Total dollars after Unknown MBE allocation (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
	All firms	250	\$17,426	\$17,426				(,,
(2)	MBE/WBE	44	\$17,420	\$1,716	9.8	22.4	-12.6	43.9
(3)	WBE	26	\$586	\$586	3.4	9.5	-6.1	35.4
	MBE	18	\$1,131	\$1,131	6.5	12.9	-6.4	50.2
(4)			· ·	,				
(5)	African American-owned	1	\$82	\$82	0.5	0.9	-0.4	52.3
(6)	Asian-Pacific American-owned	2	\$48	\$48	0.3	1.4	-1.1	20.0
(7)	Subcontinent Asian American-owned	2	\$56	\$56	0.3	0.0	0.3	200+
(8)	Hispanic American-owned	3	\$198	\$198	1.1	0.8	0.4	150.8
(9)	Native American-owned	10	\$747	\$747	4.3	9.9	-5.6	43.3
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	17	\$645	\$645	3.7			
(12)	Woman-owned DBE	6	\$104	\$104	0.6			
(13)	Minority-owned DBE	11	\$542	\$542	3.1			
(14)	African American-owned DBE	1	\$82	\$82	0.5			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	2	\$56	\$56	0.3			
(17)	Hispanic American-owned DBE	0	\$0	\$0	0.0			
(18)	Native American-owned DBE	8	\$404	\$404	2.3			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-28.
Funding: State
Type: Engineering
Time Period: July 1, 2004 - June 30, 2009
Region: Oklahoma
Role: Subcontractors and Suppliers

Firm 1	Гуре	(a) Number of contracts (subcontracts)	(b) Total dollars (thousands)	(c) Total dollars after Unknown MBE allocation (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1)	All firms	59	\$7,349	\$7,349				
(2)	MBE/WBE	4	\$71	\$71	1.0	22.3	-21.3	4.3
(3)	WBE	1	\$4	\$4	0.1	11.0	-11.0	0.5
(4)	MBE	3	\$67	\$67	0.9	11.2	-10.3	8.1
(5)	African American-owned	0	\$0	\$0	0.0	0.8	-0.8	0.0
(6)	Asian-Pacific American-owned	0	\$0	\$0	0.0	1.9	-1.9	0.0
(7)	Subcontinent Asian American-owned	2	\$50	\$50	0.7	0.0	0.7	200+
(8)	Hispanic American-owned	0	\$0	\$0	0.0	0.3	-0.3	0.0
(9)	Native American-owned	1	\$17	\$17	0.2	8.2	-8.0	2.8
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	3	\$68	\$68	0.9			
(12)	Woman-owned DBE	1	\$4	\$4	0.1			
(13)	Minority-owned DBE	2	\$64	\$64	0.9			
(14)	African American-owned DBE	0	\$0	\$0	0.0			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	1	\$47	\$47	0.6			
(17)	Hispanic American-owned DBE	0	\$0	\$0	0.0			
(18)	Native American-owned DBE	1	\$17	\$17	0.2			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-29.
Funding: Federal and State
Type: Construction and Engineering
Time Period: July 1, 2004 - December 30, 2006
Region: Oklahoma
Role: Prime contractors, Subcontractors and Suppliers

		(a) Number of contracts	(b)	(c) Total dollars after Unknown MBE allocation	(d) Actual utilization (column c / column c, row1)	(e) Utilization benchmark (availability)	(f) Difference (column d - column e)	(g) Disparity index
Firm ⁻	Гуре	(subcontracts)	(thousands)	(thousands)*	%	%	%	(d / e) x 100
(1)	All firms	3,528	\$1,225,551	\$1,225,551				
(2)	MBE/WBE	1,430	\$254,833	\$254,833	20.8	14.0	6.8	148.9
(3)	WBE	924	\$164,057	\$164,057	13.4	7.4	6.0	181.1
(4)	MBE	506	\$90,776	\$90,776	7.4	6.6	0.8	112.7
(5)	African American-owned	29	\$1,691	\$1,691	0.1	0.5	-0.3	30.6
(6)	Asian-Pacific American-owned	1	\$18	\$18	0.0	0.3	-0.3	0.5
(7)	Subcontinent Asian American-owned	4	\$545	\$545	0.0	0.2	-0.1	23.6
(8)	Hispanic American-owned	62	\$10,219	\$10,219	0.8	1.1	-0.3	73.8
(9)	Native American-owned	410	\$78,304	\$78,304	6.4	4.5	1.9	141.4
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	1,051	\$88,255	\$88,255	7.2			
(12)	Woman-owned DBE	683	\$44,730	\$44,730	3.6			
(13)	Minority-owned DBE	368	\$43,526	\$43,526	3.6			
(14)	African American-owned DBE	25	\$1,524	\$1,524	0.1			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	1	\$263	\$263	0.0			
(17)	Hispanic American-owned DBE	49	\$9,553	\$9,553	0.8			
(18)	Native American-owned DBE	293	\$32,186	\$32,186	2.6			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-30.
Funding: Federal
Type: Construction and Engineering
Time Period: July 1, 2004 - December 30, 2006
Region: Oklahoma
Role: Prime contractors, Subcontractors and Suppliers

		(a) Number of contracts	(b) Total dollars	(c) Total dollars after Unknown MBE allocation	(d) Actual utilization (column c / column c, row1)	(e) Utilization benchmark (availability)	(f) Difference (column d - column e)	(g) Disparity index
Firm	Гуре	(subcontracts)	(thousands)	(thousands)*	%	%	%	(d / e) x 100
(1)	All firms	2,868	\$1,073,603	\$1,073,603				
(2)	MBE/WBE	1,301	\$229,943	\$229,943	21.4	13.6	7.8	157.6
(3)	WBE	851	\$158,497	\$158,497	14.8	7.4	7.3	199.0
(4)	MBE	450	\$71,447	\$71,447	6.7	6.2	0.5	107.8
(5)	African American-owned	29	\$1,691	\$1,691	0.2	0.4	-0.3	38.6
(6)	Asian-Pacific American-owned	1	\$18	\$18	0.0	0.3	-0.3	0.7
(7)	Subcontinent Asian American-owned	3	\$542	\$542	0.1	0.2	-0.1	29.1
(8)	Hispanic American-owned	60	\$9,985	\$9,985	0.9	1.0	-0.1	91.4
(9)	Native American-owned	357	\$59,210	\$59,210	5.5	4.3	1.2	127.8
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	979	\$85,816	\$85,816	8.0			
(12)	Woman-owned DBE	631	\$42,745	\$42,745	4.0			
(13)	Minority-owned DBE	348	\$43,071	\$43,071	4.0			
(14)	African American-owned DBE	25	\$1,524	\$1,524	0.1			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	1	\$263	\$263	0.0			
(17)	Hispanic American-owned DBE	49	\$9,553	\$9,553	0.9			
(18)	Native American-owned DBE	273	\$31,731	\$31,731	3.0			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-31.
Funding: State
Type: Construction and Engineering
Time Period: July 1, 2004 - December 30, 2006
Region: Oklahoma
Role: Prime contractors, Subcontractors and Suppliers

Firm ⁻	Type	(a) Number of contracts (subcontracts)	(b) Total dollars (thousands)	(c) Total dollars after Unknown MBE allocation (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
	All firms	660	\$151,949	\$151,949				(, .,
` ,	MBE/WBE	129	•	<u>, </u>	16.4	16.6	-0.2	98.5
(2)		73	\$24,890	\$24,890	3.7	7.2	-3.6	50.8
(3)	WBE		\$5,560	\$5,560				
(4)	MBE	56	\$19,330	\$19,330	12.7	9.4	3.3	135.1
(5)	African American-owned	0	\$0	\$0	0.0	0.8	-0.8	0.0
(6)	Asian-Pacific American-owned	0	\$0	\$0	0.0	0.5	-0.5	0.0
(7)	Subcontinent Asian American-owned	1	\$3	\$3	0.0	0.3	-0.3	0.6
(8)	Hispanic American-owned	2	\$233	\$233	0.2	1.9	-1.8	8.0
(9)	Native American-owned	53	\$19,094	\$19,094	12.6	5.9	6.6	200+
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	72	\$2,440	\$2,440	1.6			
(12)	Woman-owned DBE	52	\$1,985	\$1,985	1.3			
(13)	Minority-owned DBE	20	\$455	\$455	0.3			
(14)	African American-owned DBE	0	\$0	\$0	0.0			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	0	\$0	\$0	0.0			
(17)	Hispanic American-owned DBE	0	\$0	\$0	0.0			
(18)	Native American-owned DBE	20	\$455	\$455	0.3			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-32.
Funding: Federal and State
Type: Construction and Engineering
Time Period: January 1, 2007 - June 30, 2009
Region: Oklahoma
Role: Prime contractors, Subcontractors and Suppliers

		(a) Number of contracts	(b) Total dollars	(c) Total dollars after Unknown MBE allocation	(d) Actual utilization (column c / column c, row1)	(e) Utilization benchmark (availability)	(f) Difference (column d - column e)	(g) Disparity index
Firm 7	Гуре	(subcontracts)	(thousands)	(thousands)*	%	%	%	(d / e) x 100
(1)	All firms	4,460	\$2,078,175	\$2,078,175				
(2)	MBE/WBE	1,778	\$362,687	\$362,687	17.5	12.6	4.8	138.1
(3)	WBE	1,146	\$236,472	\$236,472	11.4	6.9	4.4	164.2
(4)	MBE	632	\$126,215	\$126,215	6.1	5.7	0.4	106.5
(5)	African American-owned	22	\$1,777	\$1,777	0.1	0.4	-0.3	22.7
(6)	Asian-Pacific American-owned	3	\$405	\$405	0.0	0.2	-0.1	12.4
(7)	Subcontinent Asian American-owned	8	\$156	\$156	0.0	0.1	-0.1	7.9
(8)	Hispanic American-owned	62	\$19,808	\$19,808	1.0	0.9	0.0	102.5
(9)	Native American-owned	537	\$104,070	\$104,070	5.0	4.1	0.9	120.8
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	1,265	\$154,954	\$154,954	7.5			
(12)	Woman-owned DBE	753	\$75,153	\$75,153	3.6			
(13)	Minority-owned DBE	512	\$79,801	\$79,801	3.8			
(14)	African American-owned DBE	18	\$1,644	\$1,644	0.1			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	3	\$103	\$103	0.0			
(17)	Hispanic American-owned DBE	50	\$18,977	\$18,977	0.9			
(18)	Native American-owned DBE	441	\$59,077	\$59,077	2.8			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-33.
Funding: Federal
Type: Construction and Engineering
Time Period: January 1, 2007 - June 30, 2009
Region: Oklahoma
Role: Prime contractors, Subcontractors and Suppliers

		(a) Number of contracts	(b)	(c) Total dollars after Unknown MBE allocation	(d) Actual utilization (column c / column c, row1)	(e) Utilization benchmark (availability)	(f) Difference (column d - column e)	(g) Disparity index
Firm ⁻	lype	(subcontracts)	(thousands)	(thousands)*	%	%	%	(d / e) x 100
(1)	All firms	3,435	\$1,777,409	\$1,777,409				
(2)	MBE/WBE	1,467	\$303,129	\$303,129	17.1	12.2	4.9	140.0
(3)	WBE	955	\$201,934	\$201,934	11.4	6.8	4.6	168.2
(4)	MBE	512	\$101,195	\$101,195	5.7	5.4	0.3	104.8
(5)	African American-owned	20	\$1,749	\$1,749	0.1	0.3	-0.2	28.9
(6)	Asian-Pacific American-owned	3	\$405	\$405	0.0	0.2	-0.1	14.4
(7)	Subcontinent Asian American-owned	6	\$106	\$106	0.0	0.1	-0.1	6.3
(8)	Hispanic American-owned	54	\$18,860	\$18,860	1.1	0.8	0.2	126.6
(9)	Native American-owned	429	\$80,075	\$80,075	4.5	4.0	0.5	112.7
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	1,059	\$141,275	\$141,275	7.9			
(12)	Woman-owned DBE	631	\$69,641	\$69,641	3.9			
(13)	Minority-owned DBE	428	\$71,635	\$71,635	4.0			
(14)	African American-owned DBE	16	\$1,617	\$1,617	0.1			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	2	\$56	\$56	0.0			
(17)	Hispanic American-owned DBE	46	\$18,573	\$18,573	1.0			
(18)	Native American-owned DBE	364	\$51,389	\$51,389	2.9			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-34.
Funding: State
Type: Construction and Engineering
Time Period: January 1, 2007 - June 30, 2009
Region: Oklahoma
Role: Prime contractors, Subcontractors and Suppliers

Firm ⁻	Гуре	(a) Number of contracts (subcontracts)	(b) Total dollars (thousands)	(c) Total dollars after Unknown MBE allocation (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1)	All firms	1,025	\$300,765	\$300,765				
(2)	MBE/WBE	311	\$59,558	\$59,558	19.8	15.3	4.5	129.4
(3)	WBE	191	\$34,538	\$34,538	11.5	8.0	3.5	143.9
(4)	MBE	120	\$25,020	\$25,020	8.3	7.3	1.0	113.6
(5)	African American-owned	2	\$28	\$28	0.0	0.6	-0.6	1.5
(6)	Asian-Pacific American-owned	0	\$0	\$0	0.0	0.2	-0.2	0.0
(7)	Subcontinent Asian American-owned	2	\$50	\$50	0.0	0.1	-0.1	17.4
(8)	Hispanic American-owned	8	\$947	\$947	0.3	1.5	-1.2	21.3
(9)	Native American-owned	108	\$23,995	\$23,995	8.0	5.0	3.0	159.4
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	206	\$13,679	\$13,679	4.5			
(12)	Woman-owned DBE	122	\$5,513	\$5,513	1.8			
(13)	Minority-owned DBE	84	\$8,167	\$8,167	2.7			
(14)	African American-owned DBE	2	\$28	\$28	0.0			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	1	\$47	\$47	0.0			
(17)	Hispanic American-owned DBE	4	\$404	\$404	0.1			
(18)	Native American-owned DBE	77	\$7,688	\$7,688	2.6			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-35.
Funding: Federal and State
Type: Construction and Engineering
Time Period: July 1, 2004 - June 30, 2009
Region: Northeast Oklahoma
Role: Prime contractors, Subcontractors and Suppliers

		(a)	(b)	(c) Total dollars after Unknown	(d) Actual utilization (column c /	(e) Utilization benchmark	(f) Difference (column d -	(g)
Firm ⁻	Гуре	contracts (subcontracts)	Total dollars (thousands)	MBE allocation (thousands)*	column c, row1)	(availability) %	column e) %	Disparity index (d / e) x 100
(1)	All firms	1,693	\$811,112	\$811,112				
(2)	MBE/WBE	796	\$241,912	\$241,912	29.8	13.8	16.0	200+
(3)	WBE	440	\$170,036	\$170,036	21.0	8.2	12.8	200+
(4)	MBE	356	\$71,876	\$71,876	8.9	5.6	3.3	158.1
(5)	African American-owned	13	\$1,087	\$1,087	0.1	0.4	-0.3	34.0
(6)	Asian-Pacific American-owned	0	\$0	\$0	0.0	0.1	-0.1	0.0
(7)	Subcontinent Asian American-owned	2	\$71	\$71	0.0	0.1	-0.1	13.6
(8)	Hispanic American-owned	10	\$5,296	\$5,296	0.7	1.4	-0.8	45.7
(9)	Native American-owned	331	\$65,423	\$65,423	8.1	3.6	4.5	200+
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	520	\$51,157	\$51,157	6.3			
(12)	Woman-owned DBE	276	\$23,435	\$23,435	2.9			
(13)	Minority-owned DBE	244	\$27,722	\$27,722	3.4			
(14)	African American-owned DBE	12	\$1,035	\$1,035	0.1			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	1	\$48	\$48	0.0			
(17)	Hispanic American-owned DBE	8	\$5,249	\$5,249	0.6			
(18)	Native American-owned DBE	223	\$21,390	\$21,390	2.6			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-36.
Funding: Federal
Type: Construction and Engineering
Time Period: July 1, 2004 - June 30, 2009
Region: Northeast Oklahoma
Role: Prime contractors, Subcontractors and Suppliers

Firm ⁻	Гуре	(a) Number of contracts (subcontracts)	(b) Total dollars (thousands)	(c) Total dollars after Unknown MBE allocation (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1)	All firms	1,299	\$694,508	\$694,508				
(2)	MBE/WBE	646	\$200,993	\$200,993	28.9	13.3	15.6	200+
(3)	WBE	358	\$150,373	\$150,373	21.7	8.1	13.5	200+
(4)	MBE	288	\$50,619	\$50,619	7.3	5.2	2.1	139.9
(5)	African American-owned	12	\$1,073	\$1,073	0.2	0.4	-0.2	43.6
(6)	Asian-Pacific American-owned	0	\$0	\$0	0.0	0.1	-0.1	0.0
(7)	Subcontinent Asian American-owned	2	\$71	\$71	0.0	0.1	-0.1	14.7
(8)	Hispanic American-owned	8	\$5,112	\$5,112	0.7	1.4	-0.6	53.8
(9)	Native American-owned	266	\$44,363	\$44,363	6.4	3.3	3.1	193.4
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	444	\$47,440	\$47,440	6.8			
(12)	Woman-owned DBE	230	\$20,943	\$20,943	3.0			
(13)	Minority-owned DBE	214	\$26,497	\$26,497	3.8			
(14)	African American-owned DBE	11	\$1,022	\$1,022	0.1			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	1	\$48	\$48	0.0			
(17)	Hispanic American-owned DBE	7	\$5,096	\$5,096	0.7			
(18)	Native American-owned DBE	195	\$20,331	\$20,331	2.9			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-37.
Funding: State
Type: Construction and Engineering
Time Period: July 1, 2004 - June 30, 2009
Region: Northeast Oklahoma
Role: Prime contractors, Subcontractors and Suppliers

		(a)	(b)	(c) Total dollars after Unknown	(d) Actual utilization (column c /	(e) Utilization benchmark	(f) Difference (column d -	(g)
Firm 1	Гуре	contracts (subcontracts)	Total dollars (thousands)	MBE allocation (thousands)*	column c, row1)	(availability)	column e) %	Disparity index (d / e) x 100
(1)	All firms	394	\$116,604	\$116,604				
(2)	MBE/WBE	150	\$40,919	\$40,919	35.1	16.4	18.7	200+
(3)	WBE	82	\$19,662	\$19,662	16.9	8.4	8.4	199.7
(4)	MBE	68	\$21,257	\$21,257	18.2	8.0	10.3	200+
(5)	African American-owned	1	\$13	\$13	0.0	0.6	-0.6	1.8
(6)	Asian-Pacific American-owned	0	\$0	\$ 0	0.0	0.1	-0.1	0.0
(7)	Subcontinent Asian American-owned	0	\$0	\$0	0.0	0.0	0.0	0.0
(8)	Hispanic American-owned	2	\$184	\$184	0.2	1.8	-1.6	8.8
(9)	Native American-owned	65	\$21,060	\$21,060	18.1	5.4	12.6	200+
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	76	\$3,717	\$3,717	3.2			
(12)	Woman-owned DBE	46	\$2,491	\$2,491	2.1			
(13)	Minority-owned DBE	30	\$1,226	\$1,226	1.1			
(14)	African American-owned DBE	1	\$13	\$13	0.0			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	0	\$0	\$0	0.0			
(17)	Hispanic American-owned DBE	1	\$153	\$153	0.1			
(18)	Native American-owned DBE	28	\$1,060	\$1,060	0.9			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-38.
Funding: Federal and State
Type: Construction and Engineering
Time Period: July 1, 2004 - June 30, 2009
Region: Southeast Oklahoma
Role: Prime contractors, Subcontractors and Suppliers

		(a) Number of contracts	(b)	(c) Total dollars after Unknown MBE allocation	(d) Actual utilization (column c / column c, row1)	(e) Utilization benchmark (availability)	(f) Difference (column d - column e)	(g) Disparity index
Firm 7	ype	(subcontracts)	(thousands)	(thousands)*	%	%	%	(d / e) x 100
(1) A	All firms	776	\$321,660	\$321,660				
(2)	MBE/WBE	359	\$85,375	\$85,375	26.5	12.9	13.6	200+
(3)	WBE	163	\$20,594	\$20,594	6.4	4.7	1.7	137.4
(4)	MBE	196	\$64,781	\$64,781	20.1	8.2	11.9	200+
(5)	African American-owned	2	\$58	\$58	0.0	0.6	-0.6	3.1
(6)	Asian-Pacific American-owned	0	\$0	\$0	0.0	0.1	-0.1	0.0
(7)	Subcontinent Asian American-owned	1	\$7	\$7	0.0	0.0	0.0	5.1
(8)	Hispanic American-owned	8	\$743	\$743	0.2	1.1	-0.9	21.0
(9)	Native American-owned	185	\$63,972	\$63,972	19.9	6.4	13.5	200+
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	247	\$43,663	\$43,663	13.6			
(12)	Woman-owned DBE	110	\$10,379	\$10,379	3.2			
(13)	Minority-owned DBE	137	\$33,284	\$33,284	10.3			
(14)	African American-owned DBE	2	\$58	\$58	0.0			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	0	\$0	\$0	0.0			
(17)	Hispanic American-owned DBE	4	\$200	\$200	0.1			
(18)	Native American-owned DBE	131	\$33,026	\$33,026	10.3			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-39.
Funding: Federal
Type: Construction and Engineering
Time Period: July 1, 2004 - June 30, 2009
Region: Southeast Oklahoma
Role: Prime contractors, Subcontractors and Suppliers

		(a) Number of	(b)	(c) Total dollars after Unknown	(d) Actual utilization (column c /	(e) Utilization benchmark	(f) Difference (column d -	(g)
Firm ⁻	Гуре	contracts (subcontracts)	Total dollars (thousands)	MBE allocation (thousands)*	column c, row1) %	(availability) %	column e) %	Disparity index (d / e) x 100
(1)	All firms	582	\$272,157	\$272,157				
(2)	MBE/WBE	282	\$64,794	\$64,794	23.8	12.3	11.5	194.0
(3)	WBE	138	\$18,936	\$18,936	7.0	4.3	2.6	161.2
(4)	MBE	144	\$45,859	\$45,859	16.9	8.0	8.9	200+
(5)	African American-owned	2	\$58	\$58	0.0	0.5	-0.5	4.1
(6)	Asian-Pacific American-owned	0	\$0	\$0	0.0	0.1	-0.1	0.0
(7)	Subcontinent Asian American-owned	1	\$7	\$7	0.0	0.0	0.0	7.1
(8)	Hispanic American-owned	4	\$200	\$200	0.1	0.9	-0.8	8.1
(9)	Native American-owned	137	\$45,593	\$45,593	16.8	6.4	10.3	200+
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	202	\$37,360	\$37,360	13.7			
(12)	Woman-owned DBE	91	\$9,761	\$9,761	3.6			
(13)	Minority-owned DBE	111	\$27,599	\$27,599	10.1			
(14)	African American-owned DBE	2	\$58	\$58	0.0			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	0	\$0	\$0	0.0			
(17)	Hispanic American-owned DBE	4	\$200	\$200	0.1			
(18)	Native American-owned DBE	105	\$27,341	\$27,341	10.0			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-40.
Funding: State
Type: Construction and Engineering
Time Period: July 1, 2004 - June 30, 2009
Region: Southeast Oklahoma
Role: Prime contractors, Subcontractors and Suppliers

		(a) Number of	(b)	(c) Total dollars after Unknown	(d) Actual utilization (column c /	(e) Utilization benchmark	(f) Difference (column d -	(g)
Firm ⁻	Гуре	contracts (subcontracts)	Total dollars (thousands)	MBE allocation (thousands)*	column c, row1) %	(availability) %	column e) %	Disparity index (d / e) x 100
(1)	All firms	194	\$49,503	\$49,503				
(2)	MBE/WBE	77	\$20,581	\$20,581	41.6	16.4	25.1	200+
(3)	WBE	25	\$1,658	\$1,658	3.4	6.6	-3.2	51.1
(4)	MBE	52	\$18,923	\$18,923	38.2	9.9	28.3	200+
(5)	African American-owned	0	\$0	\$0	0.0	0.9	-0.9	0.0
(6)	Asian-Pacific American-owned	0	\$0	\$0	0.0	0.2	-0.2	0.0
(7)	Subcontinent Asian American-owned	0	\$0	\$0	0.0	0.1	-0.1	0.0
(8)	Hispanic American-owned	4	\$543	\$543	1.1	2.1	-1.0	51.2
(9)	Native American-owned	48	\$18,379	\$18,379	37.1	6.6	30.6	200+
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	45	\$6,303	\$6,303	12.7			
(12)	Woman-owned DBE	19	\$618	\$618	1.2			
(13)	Minority-owned DBE	26	\$5,685	\$5,685	11.5			
(14)	African American-owned DBE	0	\$0	\$0	0.0			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	0	\$0	\$0	0.0			
(17)	Hispanic American-owned DBE	0	\$0	\$0	0.0			
(18)	Native American-owned DBE	26	\$5,685	\$5,685	11.5			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-41.
Funding: Federal and State
Type: Construction and Engineering
Time Period: July 1, 2004 - June 30, 2009
Region: Central Oklahoma
Role: Prime contractors, Subcontractors and Suppliers

<u>-</u> :		(a) Number of contracts	(b)	(c) Total dollars after Unknown MBE allocation	(d) Actual utilization (column c / column c, row1)	(e) Utilization benchmark (availability)	(f) Difference (column d - column e)	(g) Disparity index
Firm ⁻	Type	(subcontracts)	(thousands)	(thousands)*	%	%	%	(d / e) x 100
(1)	All firms	4,198	\$1,641,411	\$1,641,411				
(2)	MBE/WBE	1,564	\$193,707	\$193,707	11.8	11.7	0.1	100.5
(3)	WBE	1,102	\$129,940	\$129,940	7.9	6.4	1.5	124.3
(4)	MBE	462	\$63,767	\$63,767	3.9	5.4	-1.5	72.3
(5)	African American-owned	27	\$1,754	\$1,754	0.1	0.4	-0.3	28.6
(6)	Asian-Pacific American-owned	3	\$405	\$405	0.0	0.2	-0.2	11.1
(7)	Subcontinent Asian American-owned	6	\$600	\$600	0.0	0.1	-0.1	28.1
(8)	Hispanic American-owned	72	\$13,805	\$13,805	0.8	0.8	0.1	109.2
(9)	Native American-owned	354	\$47,204	\$47,204	2.9	3.9	-1.0	74.2
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	1,212	\$110,923	\$110,923	6.8			
(12)	Woman-owned DBE	822	\$64,568	\$64,568	3.9			
(13)	Minority-owned DBE	390	\$46,355	\$46,355	2.8			
(14)	African American-owned DBE	21	\$1,620	\$1,620	0.1			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	3	\$318	\$318	0.0			
(17)	Hispanic American-owned DBE	57	\$12,993	\$12,993	0.8			
(18)	Native American-owned DBE	309	\$31,424	\$31,424	1.9			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-42.
Funding: Federal
Type: Construction and Engineering
Time Period: July 1, 2004 - June 30, 2009
Region: Central Oklahoma
Role: Prime contractors, Subcontractors and Suppliers

Firm ⁻	Гуре	(a) Number of contracts (subcontracts)	(b) Total dollars (thousands)	(c) Total dollars after Unknown MBE allocation (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
	All firms	3,363	\$1,448,089	\$1,448,089				、 , ,
, ,	MBE/WBE	1,405	\$1,448,089	\$1,446,069	12.8	11.4	1.5	112.9
(2)	· ·	,	·	, in the second				
(3)	WBE	988	\$125,308	\$125,308	8.7	6.3	2.3	137.1
(4)	MBE	417	\$60,492	\$60,492	4.2	5.1	-0.9	82.7
(5)	African American-owned	27	\$1,754	\$1,754	0.1	0.3	-0.2	36.4
(6)	Asian-Pacific American-owned	3	\$405	\$405	0.0	0.2	-0.2	15.0
(7)	Subcontinent Asian American-owned	4	\$550	\$550	0.0	0.1	-0.1	36.3
(8)	Hispanic American-owned	69	\$13,582	\$13,582	0.9	0.7	0.3	143.0
(9)	Native American-owned	314	\$44,201	\$44,201	3.1	3.8	-0.7	80.9
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	1,091	\$107,478	\$107,478	7.4			
(12)	Woman-owned DBE	740	\$62,222	\$62,222	4.3			
(13)	Minority-owned DBE	351	\$45,256	\$45,256	3.1			
(14)	African American-owned DBE	21	\$1,620	\$1,620	0.1			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	2	\$271	\$271	0.0			
(17)	Hispanic American-owned DBE	55	\$12,972	\$12,972	0.9			
(18)	Native American-owned DBE	273	\$30,393	\$30,393	2.1			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-43.
Funding: State
Type: Construction and Engineering
Time Period: July 1, 2004 - June 30, 2009
Region: Central Oklahoma
Role: Prime contractors, Subcontractors and Suppliers

		(a)	(b)	(c) Total dollars	(d) Actual utilization	(e) Utilization	(f) Difference	(g)
Firm ⁻	Гуре	Number of contracts (subcontracts)	Total dollars (thousands)	after Unknown MBE allocation (thousands)*	(column c / column c, row1) %	benchmark (availability) %	(column d - column e) %	Disparity index (d / e) x 100
(1)	All firms	835	\$193,322	\$193,322				
(2)	MBE/WBE	159	\$7,907	\$7,907	4.1	14.6	-10.5	28.1
(3)	WBE	114	\$4,632	\$4,632	2.4	6.8	-4.4	35.2
(4)	MBE	45	\$3,275	\$3,275	1.7	7.7	-6.1	21.9
(5)	African American-owned	0	\$0	\$0	0.0	0.7	-0.7	0.0
(6)	Asian-Pacific American-owned	0	\$0	\$0	0.0	0.5	-0.5	0.0
(7)	Subcontinent Asian American-owned	2	\$50	\$50	0.0	0.3	-0.3	8.1
(8)	Hispanic American-owned	3	\$223	\$223	0.1	1.6	-1.5	7.1
(9)	Native American-owned	40	\$3,002	\$3,002	1.6	4.6	-3.1	33.6
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	121	\$3,445	\$3,445	1.8			
(12)	Woman-owned DBE	82	\$2,346	\$2,346	1.2			
(13)	Minority-owned DBE	39	\$1,099	\$1,099	0.6			
(14)	African American-owned DBE	0	\$0	\$0	0.0			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	1	\$47	\$47	0.0			
(17)	Hispanic American-owned DBE	2	\$21	\$21	0.0			
(18)	Native American-owned DBE	36	\$1,031	\$1,031	0.5			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-44.
Funding: Federal and State
Type: Construction and Engineering
Time Period: July 1, 2004 - June 30, 2009
Region: Panhandle
Role: Prime contractors, Subcontractors and Suppliers

		(a)	(b)	(c) Total dollars after Unknown	(d) Actual utilization (column c /	(e) Utilization benchmark	(f) Difference (column d -	(g)
Firm 1	Гуре	contracts (subcontracts)	Total dollars (thousands)	MBE allocation (thousands)*	column c, row1)	(availability)	column e) %	Disparity index (d / e) x 100
(1)	All firms	545	\$193,357	\$193,357				
(2)	MBE/WBE	186	\$41,343	\$41,343	21.4	21.3	0.1	100.3
(3)	WBE	126	\$32,034	\$32,034	16.6	13.0	3.6	127.6
(4)	MBE	60	\$9,309	\$9,309	4.8	8.3	-3.5	57.8
(5)	African American-owned	6	\$187	\$187	0.1	0.5	-0.4	19.3
(6)	Asian-Pacific American-owned	1	\$18	\$18	0.0	0.1	-0.1	9.7
(7)	Subcontinent Asian American-owned	3	\$23	\$23	0.0	0.0	0.0	26.9
(8)	Hispanic American-owned	19	\$6,804	\$6,804	3.5	1.2	2.3	200+
(9)	Native American-owned	31	\$2,276	\$2,276	1.2	6.5	-5.3	18.2
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	137	\$16,199	\$16,199	8.4			
(12)	Woman-owned DBE	85	\$ 7, 103	\$7,103	3.7			
(13)	Minority-owned DBE	52	\$9,096	\$9,096	4.7			
(14)	African American-owned DBE	5	\$73	\$73	0.0			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	0	\$0	\$O	0.0			
(17)	Hispanic American-owned DBE	16	\$6,747	\$6,747	3.5			
(18)	Native American-owned DBE	31	\$2,276	\$2,276	1.2			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-45.
Funding: Federal
Type: Construction and Engineering
Time Period: July 1, 2004 - June 30, 2009
Region: Panhandle
Role: Prime contractors, Subcontractors and Suppliers

		(a) Number of contracts	(b) Total dollars	(c) Total dollars after Unknown MBE allocation	(d) Actual utilization (column c / column c, row1)	(e) Utilization benchmark (availability)	(f) Difference (column d - column e)	(g) Disparity index
Firm	Гуре	(subcontracts)	(thousands)	(thousands)*	%	%	%	(d / e) x 100
(1)	All firms	423	\$150,743	\$150,743				
(2)	MBE/WBE	161	\$31,421	\$31,421	20.8	21.3	-0.5	97.7
(3)	WBE	108	\$22,520	\$22,520	14.9	13.2	1.7	113.1
(4)	MBE	53	\$8,901	\$8,901	5.9	8.1	-2.2	72.7
(5)	African American-owned	6	\$187	\$187	0.1	0.5	-0.4	25.9
(6)	Asian-Pacific American-owned	1	\$18	\$18	0.0	0.1	-0.1	11.2
(7)	Subcontinent Asian American-owned	2	\$20	\$20	0.0	0.1	0.0	25.9
(8)	Hispanic American-owned	18	\$6,574	\$6,574	4.4	1.2	3.2	200+
(9)	Native American-owned	26	\$2,102	\$2,102	1.4	6.3	-4.9	22.1
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	121	\$15,075	\$15,075	10.0			
(12)	Woman-owned DBE	75	\$6,384	\$6,384	4.2			
(13)	Minority-owned DBE	46	\$8,691	\$8,691	5.8			
(14)	African American-owned DBE	5	\$73	\$73	0.0			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	0	\$0	\$0	0.0			
(17)	Hispanic American-owned DBE	15	\$6,517	\$6,517	4.3			
(18)	Native American-owned DBE	26	\$2,102	\$2,102	1.4			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-46.
Funding: State
Type: Construction and Engineering
Time Period: July 1, 2004 - June 30, 2009
Region: Panhandle
Role: Prime contractors, Subcontractors and Suppliers

		(a)	(b)	(c) Total dollars	(d) Actual utilization	(e) Utilization	(f) Difference	(g)
Firm ⁻	Гуре	Number of contracts (subcontracts)	Total dollars (thousands)	after Unknown MBE allocation (thousands)*	(column c / column c, row1)	benchmark (availability)	(column d - column e)	Disparity index (d / e) x 100
(1)	All firms	122	\$42,614	\$42,614				
(2)	MBE/WBE	25	\$9,921	\$9,921	23.3	21.2	2.1	109.8
(3)	WBE	18	\$9,513	\$9,513	22.3	12.2	10.2	183.6
(4)	MBE	7	\$408	\$408	1.0	9.1	-8.1	10.6
(5)	African American-owned	0	\$0	\$0	0.0	0.6	-0.6	0.0
(6)	Asian-Pacific American-owned	0	\$0	\$0	0.0	0.1	-0.1	0.0
(7)	Subcontinent Asian American-owned	1	\$3	\$3	0.0	0.0	0.0	35.8
(8)	Hispanic American-owned	1	\$230	\$230	0.5	1.4	-0.9	38.7
(9)	Native American-owned	5	\$174	\$174	0.4	7.0	-6.6	5.9
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	16	\$1,124	\$1,124	2.6			
(12)	Woman-owned DBE	10	\$719	\$719	1.7			
(13)	Minority-owned DBE	6	\$405	\$405	0.9			
(14)	African American-owned DBE	0	\$0	\$0	0.0			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	0	\$0	\$0	0.0			
(17)	Hispanic American-owned DBE	1	\$230	\$230	0.5			
(18)	Native American-owned DBE	5	\$174	\$174	0.4			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-47.
Funding: Federal and State
Type: Construction and Engineering
Time Period: July 1, 2004 - June 30, 2009
Region: Southwest Oklahoma
Role: Prime contractors, Subcontractors and Suppliers

		(a)	(b)	(c) Total dollars	(d) Actual utilization	(e) Utilization	(f) Difference	(g)
Firm 1	^Т уре	Number of contracts (subcontracts)	Total dollars (thousands)	after Unknown MBE allocation (thousands)*	(column c / column c, row1) %	benchmark (availability) %	(column d - column e) %	Disparity index (d / e) x 100
(1)	All firms	728	\$304,202	\$304,202				
(2)	MBE/WBE	300	\$55,165	\$55,165	18.1	13.6	4.6	133.8
(3)	WBE	238	\$47,920	\$47,920	15.8	7.7	8.1	200+
(4)	MBE	62	\$7,245	\$7,245	2.4	5.9	-3.5	40.6
(5)	African American-owned	3	\$382	\$382	0.1	0.4	-0.3	33.4
(6)	Asian-Pacific American-owned	0	\$0	\$O	0.0	0.1	-0.1	0.0
(7)	Subcontinent Asian American-owned	0	\$0	\$O	0.0	0.0	0.0	0.0
(8)	Hispanic American-owned	15	\$3,378	\$3,378	1.1	0.9	0.2	121.9
(9)	Native American-owned	44	\$3,485	\$3,485	1.1	4.5	-3.3	25.7
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	198	\$21,255	\$21,255	7.0			
(12)	Woman-owned DBE	143	\$14,398	\$14,398	4.7			
(13)	Minority-owned DBE	55	\$6,857	\$6,857	2.3			
(14)	African American-owned DBE	3	\$382	\$382	0.1			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	0	\$0	\$O	0.0			
(17)	Hispanic American-owned DBE	14	\$3,342	\$3,342	1.1			
(18)	Native American-owned DBE	38	\$3,133	\$3,133	1.0			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-48.
Funding: Federal
Type: Construction and Engineering
Time Period: July 1, 2004 - June 30, 2009
Region: Southwest Oklahoma
Role: Prime contractors, Subcontractors and Suppliers

Firm ⁻	Гуре	(a) Number of contracts (subcontracts)	(b) Total dollars (thousands)	(c) Total dollars after Unknown MBE allocation (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1)	All firms	590	\$254,130	\$254,130				
(2)	MBE/WBE	271	\$50,046	\$50,046	19.7	13.6	6.1	145.2
(3)	WBE	213	\$43,288	\$43,288	17.0	7.8	9.2	200+
(4)	МВЕ	58	\$6,758	\$6,758	2.7	5.7	-3.1	46.3
(5)	African American-owned	2	\$368	\$368	0.1	0.4	-0.2	38.7
(6)	Asian-Pacific American-owned	0	\$0	\$0	0.0	0.1	-0.1	0.0
(7)	Subcontinent Asian American-owned	0	\$0	\$0	0.0	0.0	0.0	0.0
(8)	Hispanic American-owned	15	\$3,378	\$3,378	1.3	0.9	0.4	146.6
(9)	Native American-owned	41	\$3,012	\$3,012	1.2	4.3	-3.2	27.3
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	178	\$19,724	\$19,724	7.8			
(12)	Woman-owned DBE	126	\$13,074	\$13,074	5.1			
(13)	Minority-owned DBE	52	\$6,650	\$6,650	2.6			
(14)	African American-owned DBE	2	\$368	\$368	0.1			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	0	\$0	\$0	0.0			
(17)	Hispanic American-owned DBE	14	\$3,342	\$3,342	1.3			
(18)	Native American-owned DBE	36	\$2,940	\$2,940	1.2			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-49.
Funding: State
Type: Construction and Engineering
Time Period: July 1, 2004 - June 30, 2009
Region: Southwest Oklahoma
Role: Prime contractors, Subcontractors and Suppliers

		(a) Number of	(b)	(c) Total dollars after Unknown	(d) Actual utilization (column c /	(e) Utilization benchmark	(f) Difference (column d -	(g)
Firm 1	Гуре	contracts (subcontracts)	Total dollars (thousands)	MBE allocation (thousands)*	column c, row1) %	(availability) %	column e) %	Disparity index (d / e) x 100
(1)	All firms	138	\$50,072	\$50,072				
(2)	MBE/WBE	29	\$5,119	\$5,119	10.2	13.5	-3.3	75.6
(3)	WBE	25	\$4,632	\$4,632	9.3	7.0	2.2	131.7
(4)	MBE	4	\$487	\$487	1.0	6.5	-5.5	15.0
(5)	African American-owned	1	\$14	\$14	0.0	0.4	-0.4	7.4
(6)	Asian-Pacific American-owned	0	\$0	\$O	0.0	0.1	-0.1	0.0
(7)	Subcontinent Asian American-owned	0	\$0	\$O	0.0	0.0	0.0	0.0
(8)	Hispanic American-owned	0	\$0	\$0	0.0	0.9	-0.9	0.0
(9)	Native American-owned	3	\$473	\$473	0.9	5.0	-4.1	18.7
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	20	\$1,531	\$1,531	3.1			
(12)	Woman-owned DBE	17	\$1,324	\$1,324	2.6			
(13)	Minority-owned DBE	3	\$207	\$207	0.4			
(14)	African American-owned DBE	1	\$14	\$14	0.0			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	0	\$0	\$0	0.0			
(17)	Hispanic American-owned DBE	0	\$0	\$0	0.0			
(18)	Native American-owned DBE	2	\$193	\$193	0.4			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-50.
Funding: Federal and State
Type: Construction
Time Period: July 1, 2004 - June 30, 2009
Region: Oklahoma
Role: Prime contractors

		(a)	(b)	(c)	(d)	(e)	(f)	(g)
Firm 1	[⊺] ype	Number of contracts (subcontracts)	Total dollars (thousands)	Total dollars after Unknown MBE allocation (thousands)*	Actual utilization (column c / column c, row1) %	Utilization benchmark (availability) %	Difference (column d - column e) %	Disparity index (d / e) x 100
(1) /	All firms	1,612	\$1,100,546	\$1,100,546				
(2)	MBE/WBE	321	\$193,566	\$193,566	17.6	12.3	5.3	142.9
(3)	WBE	162	\$113,308	\$113,308	10.3	6.7	3.6	154.8
(4)	MBE	159	\$80,258	\$80,258	7.3	5.7	1.6	128.8
(5)	African American-owned	0	\$0	\$0	0.0	0.4	-0.4	0.0
(6)	Asian-Pacific American-owned	0	\$0	\$0	0.0	0.0	0.0	100.0
(7)	Subcontinent Asian American-owned	0	\$0	\$0	0.0	0.0	0.0	100.0
(8)	Hispanic American-owned	11	\$5,119	\$5,119	0.5	1.2	-0.7	39.3
(9)	Native American-owned	148	\$75,138	\$75,138	6.8	4.1	2.7	165.7
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	95	\$33,992	\$33,992	3.1			
(12)	Woman-owned DBE	3	\$824	\$824	0.1			
(13)	Minority-owned DBE	92	\$33,168	\$33,168	3.0			
(14)	African American-owned DBE	0	\$0	\$0	0.0			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	0	\$0	\$0	0.0			
(17)	Hispanic American-owned DBE	11	\$5,119	\$5,119	0.5			
(18)	Native American-owned DBE	81	\$28,049	\$28,049	2.5			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-51.
Funding: Federal
Type: Construction
Time Period: July 1, 2004 - June 30, 2009
Region: Oklahoma
Role: Prime contractors

Firm 1	⁻ уре	(a) Number of contracts (subcontracts)	(b) Total dollars (thousands)	(c) Total dollars after Unknown MBE allocation (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1)	All firms	1,088	\$777,955	\$777,955				
(2)	MBE/WBE	245	\$133,470	\$133,470	17.2	11.7	5.4	146.5
(3)	WBE	136	\$88,826	\$88,826	11.4	6.4	5.0	177.4
(4)	MBE	109	\$44,644	\$44,644	5.7	5.3	0.5	108.8
(5)	African American-owned	0	\$0	\$0	0.0	0.3	-0.3	0.0
(6)	Asian-Pacific American-owned	0	\$0	\$0	0.0	0.0	0.0	100.0
(7)	Subcontinent Asian American-owned	0	\$0	\$0	0.0	0.0	0.0	100.0
(8)	Hispanic American-owned	11	\$5,119	\$5,119	0.7	1.1	-0.4	61.8
(9)	Native American-owned	98	\$39,525	\$39,525	5.1	3.9	1.2	129.5
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	88	\$29,017	\$29,017	3.7			
(12)	Woman-owned DBE	3	\$824	\$824	0.1			
(13)	Minority-owned DBE	85	\$28,193	\$28,193	3.6			
(14)	African American-owned DBE	0	\$0	\$0	0.0			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	0	\$0	\$0	0.0			
(17)	Hispanic American-owned DBE	11	\$5,119	\$5,119	0.7			
(18)	Native American-owned DBE	74	\$23,074	\$23,074	3.0			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-52.
Funding: State
Type: Construction
Time Period: July 1, 2004 - June 30, 2009
Region: Oklahoma
Role: Prime contractors

		(a) Number of	(b)	(c) Total dollars after Unknown	(d) Actual utilization (column c /	(e) Utilization benchmark	(f) Difference (column d -	(g)
Firm ⁻	Гуре	contracts (subcontracts)	Total dollars (thousands)	MBE allocation (thousands)*	column c, row1) %	(availability)	column e) %	Disparity index (d / e) x 100
(1)	All firms	524	\$322,591	\$322,591				
(2)	MBE/WBE	76	\$60,096	\$60,096	18.6	13.8	4.9	135.4
(3)	WBE	26	\$24,482	\$24,482	7.6	7.2	0.4	105.9
(4)	MBE	50	\$35,614	\$35,614	11.0	6.6	4.4	167.4
(5)	African American-owned	0	\$0	\$0	0.0	0.5	-0.5	0.0
(6)	Asian-Pacific American-owned	0	\$0	\$0	0.0	0.0	0.0	100.0
(7)	Subcontinent Asian American-owned	0	\$0	\$0	0.0	0.0	0.0	100.0
(8)	Hispanic American-owned	0	\$0	\$0	0.0	1.5	-1.5	0.0
(9)	Native American-owned	50	\$35,614	\$35,614	11.0	4.6	6.4	200+
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	7	\$4,975	\$4,975	1.5			
(12)	Woman-owned DBE	0	\$0	\$0	0.0			
(13)	Minority-owned DBE	7	\$4,975	\$4,975	1.5			
(14)	African American-owned DBE	0	\$0	\$0	0.0			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	0	\$0	\$0	0.0			
(17)	Hispanic American-owned DBE	0	\$0	\$0	0.0			
(18)	Native American-owned DBE	7	\$4,975	\$4,975	1.5			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Contracts Under \$500k

Figure K-53.
Funding: Federal and State
Type: Engineering
Time Period: July 1, 2004 - June 30, 2009
Region: Oklahoma
Role: Prime contractors

		(a)	(b)	(c) Total dollars	(d) Actual utilization	(e) Utilization	(f) Difference	(g)
Firm Type		Number of contracts (subcontracts)	Total dollars (thousands)	after Unknown MBE allocation (thousands)*	(column c / column c, row1) %	benchmark (availability) %	(column d - column e) %	Disparity index (d / e) x 100
(1)	All firms	297	\$55,080	\$55,080				
(2)	MBE/WBE	38	\$4,964	\$4,964	9.0	22.3	-13.3	40.5
(3)	WBE	18	\$3,234	\$3,234	5.9	5.1	0.8	115.0
(4)	MBE	20	\$1,730	\$1,730	3.1	17.2	-14.0	18.3
(5)	African American-owned	4	\$495	\$495	0.9	2.6	-1.7	34.9
(6)	Asian-Pacific American-owned	1	\$21	\$21	0.0	2.5	-2.5	1.6
(7)	Subcontinent Asian American-owned	0	\$0	\$0	0.0	1.3	-1.3	0.0
(8)	Hispanic American-owned	9	\$858	\$858	1.6	2.5	-1.0	61.3
(9)	Native American-owned	6	\$355	\$355	0.6	8.3	-7.7	7.8
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	15	\$2,264	\$2,264	4.1			
(12)	Woman-owned DBE	11	\$1,729	\$1,729	3.1			
(13)	Minority-owned DBE	4	\$535	\$535	1.0			
(14)	African American-owned DBE	3	\$435	\$435	0.8			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	0	\$0	\$0	0.0			
(17)	Hispanic American-owned DBE	0	\$0	\$0	0.0			
(18)	Native American-owned DBE	1	\$100	\$100	0.2			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-54.
Funding: Federal Contracts Under \$500k

Type: Engineering Time Period: July 1, 2004 - June 30, 2009 Region: Oklahoma

Role: Prime contractors

		(a)	(b)	(c) Total dollars	(d) Actual utilization	(e) Utilization	(f) Difference	(g)
Firm ⁻	Гуре	Number of contracts (subcontracts)	Total dollars (thousands)	after Unknown MBE allocation (thousands)*	(column c / column c, row1) %	benchmark (availability) %	(column d - column e) %	Disparity index (d / e) x 100
(1)	All firms	237	\$40,774	\$40,774				
(2)	MBE/WBE	30	\$3,533	\$3,533	8.7	22.5	-13.8	38.6
(3)	WBE	15	\$2,549	\$2,549	6.3	5.5	0.7	113.5
(4)	MBE	15	\$984	\$984	2.4	16.9	-14.5	14.2
(5)	African American-owned	4	\$495	\$495	1.2	2.6	-1.4	47.2
(6)	Asian-Pacific American-owned	1	\$21	\$21	0.1	2.5	-2.4	2.1
(7)	Subcontinent Asian American-owned	0	\$0	\$0	0.0	1.2	-1.2	0.0
(8)	Hispanic American-owned	4	\$112	\$112	0.3	2.5	-2.2	11.0
(9)	Native American-owned	6	\$355	\$355	0.9	8.1	-7.3	10.7
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	12	\$1,579	\$1,579	3.9			
(12)	Woman-owned DBE	8	\$1,044	\$1,044	2.6			
(13)	Minority-owned DBE	4	\$535	\$535	1.3			
(14)	African American-owned DBE	3	\$435	\$435	1.1			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	0	\$0	\$0	0.0			
(17)	Hispanic American-owned DBE	0	\$0	\$0	0.0			
(18)	Native American-owned DBE	1	\$100	\$100	0.2			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-55.
Funding: State Contracts Under \$500k
Type: Engineering

Time Period: July 1, 2004 - June 30, 2009

Region: Oklahoma Role: Prime contractors

		(a) Number of	(b)	(c) Total dollars after Unknown	(d) Actual utilization (column c /	(e) Utilization benchmark	(f) Difference (column d -	(g)
Firm Type		contracts (subcontracts)	Total dollars (thousands)	MBE allocation (thousands)*	column c, row1) %	(availability) %	column e) %	Disparity index (d / e) x 100
(1)	All firms	60	\$14,307	\$14,307				
(2)	MBE/WBE	8	\$1,430	\$1,430	10.0	21.8	-11.8	45.9
(3)	WBE	3	\$685	\$685	4.8	4.0	0.8	121.0
(4)	MBE	5	\$745	\$745	5.2	17.8	-12.6	29.2
(5)	African American-owned	0	\$0	\$0	0.0	2.6	-2.6	0.0
(6)	Asian-Pacific American-owned	0	\$0	\$0	0.0	2.6	-2.6	0.0
(7)	Subcontinent Asian American-owned	0	\$0	\$0	0.0	1.3	-1.3	0.0
(8)	Hispanic American-owned	5	\$745	\$745	5.2	2.7	2.6	196.3
(9)	Native American-owned	0	\$0	\$0	0.0	8.8	-8.8	0.0
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	3	\$685	\$685	4.8			
(12)	Woman-owned DBE	3	\$685	\$685	4.8			
(13)	Minority-owned DBE	0	\$0	\$0	0.0			
(14)	African American-owned DBE	0	\$0	\$0	0.0			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	0	\$0	\$0	0.0			
(17)	Hispanic American-owned DBE	0	\$0	\$0	0.0			
(18)	Native American-owned DBE	0	\$0	\$0	0.0			
(19)	Unknown DBE-MBE	0	\$0	\$0	0.0			
(20)	White male-owned DBE	0	\$0					
(21)	Unknown DBE	0	\$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-56. Funding: Federal

Type: Construction and Engineering Time Period: July 1, 2004 - June 30, 2009

Region: Oklahoma

Role: Prime contractors, Subcontractors and Suppliers

Firm ⁻	Туре	(a) Number of contracts (subcontracts)	(b) Total dollars (thousands)	(c) Total dollars after Unknown MBE allocation (thousands)*	(e) Utilization benchmark (availability) %
(1)	All firms	6,306	\$2,851,094	\$2,851,094	
(2)	MBE/WBE	2,768	\$533,072	\$533,072	9.3
(3)	WBE	1,806	\$360,430	\$360,430	3.9
(4)	MBE	962	\$172,641	\$172,641	5.4
(5)	African American-owned	49	\$3,440	\$3,440	0.4
(6)	Asian-Pacific American-owned	4	\$423	\$423	0.2
(7)	Subcontinent Asian American-owned	9	\$648	\$648	0.0
(8)	Hispanic American-owned	114	\$28,845	\$28,845	0.7
(9)	Native American-owned	786	\$139,285	\$139,285	4.1
(10)	Unknown MBE	0	\$0		

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Current and potential DBEs

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-57. Funding: Federal Type: Construction

Time Period: July 1, 2004 - June 30, 2009

Region: Oklahoma

Role: Prime contractors, Subcontractors and Suppliers

Firm [*]	Гуре	(a) Number of contracts (subcontracts)	(b) Total dollars (thousands)	(c) Total dollars after Unknown MBE allocation (thousands)*	(e) Utilization benchmark (availability) %
(1)	All firms	5,741	\$2,709,509	\$2,709,509	
(2)	MBE/WBE	2,693	\$527,469	\$527,469	9.0
(3)	WBE	1,765	\$357,296	\$357,296	4.0
(4)	MBE	928	\$170,173	\$170,173	5.0
(5)	African American-owned	44	\$2,863	\$2,863	0.3
(6)	Asian-Pacific American-owned	0	\$0	\$0	0.0
(7)	Subcontinent Asian American-owned	7	\$592	\$592	0.0
(8)	Hispanic American-owned	107	\$28,535	\$28,535	0.7
(9)	Native American-owned	770	\$138,183	\$138,183	4.0
(10)	Unknown MBE	0	\$0		

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Current and potential DBEs

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-58. Funding: Federal Type: Engineering

Current and potential DBEs

Time Period: July 1, 2004 - June 30, 2009

Region: Oklahoma

Role: Prime contractors, Subcontractors and Suppliers

Firm ⁻	Гуре	(a) Number of contracts (subcontracts)	(b) Total dollars (thousands)	(c) Total dollars after Unknown MBE allocation (thousands)*	(e) Utilization benchmark (availability) %
(1)	All firms	565	\$141,585	\$141,585	
(2)	MBE/WBE	75	\$5,603	\$5,603	16.2
(3)	WBE	41	\$3,135	\$3,135	3.1
(4)	MBE	34	\$2,469	\$2,469	13.1
(5)	African American-owned	5	\$577	\$577	0.9
(6)	Asian-Pacific American-owned	4	\$423	\$423	3.9
(7)	Subcontinent Asian American-owned	2	\$56	\$56	0.0
(8)	Hispanic American-owned	7	\$311	\$311	1.4
(9)	Native American-owned	16	\$1,102	\$1,102	7.0
(10)	Unknown MBE	0	\$0		

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

^{*} Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.