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

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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-employment 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

_	Self-employment 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).