

2012 DBE Program Disparity Study

State of Washington Department of Transportation

Final Report

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2012 DBE Program Disparity Study

Prepared for

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CHAPTER ES. Executive Summary

The federal government requires transportation agencies to implement the Federal Disadvantaged Business Enterprise (DBE) Program if they receive U.S. Department of Transportation (USDOT) funds. The Washington State Department of Transportation (WSDOT) receives USDOT funds through the Federal Highway Administration (FHWA) and other USDOT agencies, and thus, must implement the Federal DBE Program. WSDOT's implementation of the Federal DBE Program is guided by regulations in 49 Code of Federal Regulations (CFR) Part 26, USDOT guidance, and relevant court decisions.

As part of its implementation of the Federal DBE Program, WSDOT is required to:

- Set an overall aspirational goal for DBE participation in its FHWA-funded contracts;¹
- Project the portion of its overall DBE goal to be met through race- and gender-neutral means, and if necessary, project the portion to be met through race- and gender-conscious means, such as contract-specific DBE goals; and
- Identify the specific racial/ethnic and gender groups that will be eligible for race- and gender-conscious measures, if the agency determines that such measures are necessary.

WSDOT must then submit its proposed implementation of the Federal DBE Program to USDOT for review and approval.

WSDOT retained BBC Research & Consulting (BBC) to conduct a "disparity study" to assist in its implementation of the Federal DBE Program. The disparity study examined whether there were any disparities between WSDOT's utilization of minority- and women-owned businesses (MBE/WBEs) on its transportation contracts and the availability of those businesses to perform that work. Note that the study team considered businesses as MBE/WBEs if they were owned and operated by minorities or women, regardless of whether they were certified as DBEs or as MBE/WBEs through the Washington State Office of Minority and Women's Business Enterprises (OMWBE). In this study, "certified DBEs" refers to those businesses that are specifically certified as such through OMWBE.

The study provided information that WSDOT might consider in setting its overall DBE goal; determining the portion of the goal that can be met through race- and gender-neutral and, if necessary, race- and gender conscious measures; and, if appropriate, determining which groups would be eligible for race- and gender-conscious measures.

¹ Although USDOT requires an agency to set its goal every three years, it is an *annual* aspirational goal. That is, the agency must monitor DBE participation in its USDOT-funded contracts every federal fiscal year (FFY). If DBE participation for a particular FFY is less than the overall DBE goal for that year, then the agency must analyze the reasons for the difference, and establish specific measures to address the difference and enable the agency to meet the goal in the next FFY.

History of WSDOT's Implementation of the Federal DBE Program

WSDOT has been implementing variations of the Federal DBE Program and the regulations that preceded it since the 1980s. After enactment of the Transportation Equity Act for the 21st Century (TEA-21) in 1998, USDOT established a new Federal DBE Program to be implemented by state and local agencies receiving USDOT funds.

Western States Paving decision in 2005. In May 2005, the Ninth Circuit Court of Appeals in Western States Paving v. Washington State DOT held that the Federal DBE Program enacted by Congress was facially constitutional, but ruled that WSDOT's implementation of the program was unconstitutional.² The court held that in order to satisfy requirements of *strict scrutiny*, a public entity implementing race- and gender-conscious measures must have evidence of discrimination in its transportation contracting industry.³

In response to the *Western States Paving* decision, WSDOT and other state and local agencies that were affected by the decision discontinued their use of race- and gender-conscious elements of the Federal DBE Program. USDOT recommended that agencies implementing the Federal DBE Program should consider conducting availability and disparity studies to satisfy the requirements of strict scrutiny.

2005 Availability Study. WSDOT completed its first availability study in October 2005. The study measured the availability of MBE/WBEs for WSDOT transportation contracts. The study did not examine WSDOT's utilization of MBE/WBEs nor did it examine any disparities between MBE/WBE utilization and availability. At the time that the 2005 availability study was released (October 2005), WSDOT was not using contract-specific DBE goals as part of its implementation of the Federal DBE Program.

Implementation of contract-specific DBE goals. Beginning in October 2006, WSDOT resumed setting contract-specific DBE goals on certain FHWA-funded construction contracts. All groups identified in 49 CFR Part 26 were deemed eligible for participation in the goals program. WSDOT's implementation of the goals program was based in part on information from its 2005 availability study.

WSDOT did not set any contract-specific DBE goals on FHWA-funded engineering contracts until 2012. Prior to that time, the agency only used race- and gender-neutral measures to encourage MBE/WBE participation on engineering contracts.

Implementation of voluntary MBE/WBE goals. Initiative 200 amended state law to prohibit the use of race- and gender-based preferences in public contracting, public employment, and public education.⁴ However, Initiative 200 did not prohibit those actions if an agency is required to take them "to establish or maintain eligibility for any federal program, if ineligibility would result in a loss of federal funds to the state." Thus, Initiative 200 prohibited government

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² Western States Paving Co. v. Washington State DOT, 407 F.3d 983 (9th Cir. 2005), cert. denied, 546 U.S. 1170 (2006).

³ Certain Federal Courts of Appeal, including the Ninth Circuit Court of Appeals, apply *intermediate* scrutiny to gender-conscious programs rather than strict scrutiny. For details, see Appendix B.

⁴ RCW 49.60.400(1)

agencies in Washington from applying race- and gender-conscious measures to state-funded contracts but not necessarily to federally-funded contracts. Since Initiative 200's passing, WSDOT has been setting voluntary MBE/WBE goals to many state-funded contracts, but does not require contractors to meet those goals or show good faith efforts to do so.

Analyses in the 2012 Disparity Study

Along with measuring potential disparities between MBE/WBE utilization and availability on WSDOT transportation contracts, the disparity study also examined other quantitative and qualitative information related to the legal framework surrounding an agency's implementation of the Federal DBE Program; local marketplace conditions for MBE/WBEs and for other small businesses; and contracting practices and business assistance programs that the agency currently has in place.

- The study team conducted an analysis of federal regulations, case law, and other information to guide the methodology for the disparity study. The analysis included a review of federal requirements related to the Federal DBE Program and an assessment of any state requirements concerning the implementation of the Federal DBE program.
- BBC conducted quantitative analyses of the success of minorities, women, and MBE/WBEs throughout Washington's transportation contracting industry. In addition, the study team collected qualitative information about potential barriers that small businesses and MBE/WBEs face in the Washington transportation contracting industry through in-depth anecdotal interviews, public hearings, and public meetings.
- BBC analyzed the percentage of MBE/WBEs that are "ready, willing, and able" to perform on WSDOT transportation prime contracts and subcontracts. That analysis was based on telephone interviews that the study team completed with more than 3,000 Washington businesses that work in industries related to the types of transportation contracts that WSDOT and local agencies award. (The study team attempted telephone interviews with every business establishment that it identified as doing work that is relevant to WSDOT transportation contracting.)
- BBC analyzed the dollars that WSDOT and local agencies awarded to MBE/WBEs on more than 11,000 transportation prime contracts and subcontracts executed between October 1, 2008 and September 30, 2011 (i.e., FFYs 2009, 2010, and 2011). BBC analyzed contracts that were USDOT-funded and contracts that were solely state-funded.
- BBC examined whether there were any disparities between the utilization of MBE/WBEs on transportation contracts that WSDOT and local agencies awarded during the study period. The study team also assessed whether any observed disparities were statistically significant.
- BBC provided WSDOT with information from the availability analysis and other research that the agency might consider in setting its three-year overall aspirational goal, including the base figure and consideration of a "step-2" adjustment.
- BBC reviewed WSDOT's current contracting practices and Federal DBE Program measures and provided guidance related to additional program options and refinements to those practices and measures.

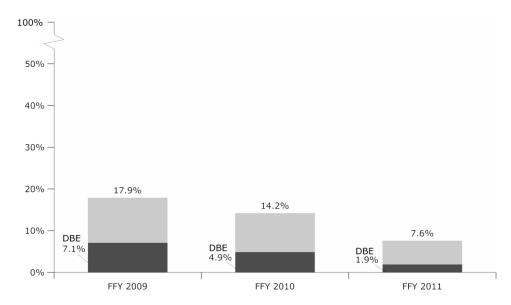
Utilization and Disparity Analysis Results for Individual DBE Groups

In accordance with the Federal DBE Program, if WSDOT determines that it needs to continue the use of race- and gender-conscious measures on FHWA-funded contracts, then it should evaluate which DBE groups should be considered eligible to participate in those programs. If WSDOT determines that only certain DBE groups (e.g., groups classified as underutilized DBEs) and not other groups are eligible, then it must submit a waiver request to FHWA.

Utilization and disparity analysis results for WSDOT transportation contracts — along with other pertinent information — might be relevant to the agency's determination of which DBE groups could be eligible for any race- or gender-conscious measures. BBC examined whether there were any disparities between WSDOT's utilization of individual MBE/WBE groups on its transportation contracts and the availability of those businesses to perform that work.

Utilization results. The study team measured MBE/WBE participation in terms of "utilization" — the percentage of prime contract and subcontract dollars that WSDOT and local agencies awarded to MBE/WBEs during the study period. Figure ES-1 presents overall MBE/WBE utilization for each study period year (i.e., FFYs 2009, 2010, and 2011). The darker portion of each bar presents WSDOT's utilization of MBE/WBEs that were DBE-certified during the study period. As shown in Figure ES-1, MBE/WBE utilization on WSDOT transportation contracts declined dramatically between FFY 2009 (17.9%) and FFY 2011 (7.6%). Certified DBE utilization also fell sharply, declining from 7.1 percent in FFY 2009 to only 1.9 percent in FFY 2011.

Figure ES-1. MBE/WBE utilization on WSDOT and local agency transportation contracts (FHWA- and state-funded) by study period year



Note: Includes FHWA- and state-funded WSDOT and local agency contracts.

Darker portion of bar presents certified DBE utilization.

Number of prime contracts/subcontracts analyzed was 4,244 for FFY 2009, 3,883 for FFY 2010, and 3,258 for FFY 2011.

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

Source: BBC Research & Consulting from WSDOT contracting data.

Disparity analysis results. Although information about MBE/WBE utilization is instructive on its own, it is even more instructive when it is compared with the utilization that might be expected based on the availability of MBE/WBEs for WSDOT work. As part of the disparity study, BBC compared the utilization of MBE/WBEs on WSDOT transportation prime contracts and subcontracts with the percentage of contract dollars that MBE/WBEs might be expected to receive based on their availability for that work.

BBC expressed both utilization and availability as percentages of the total dollars that a particular group received for a particular set of contracts (e.g., 5% utilization compared with 4% availability). BBC then calculated a "disparity index" by dividing utilization by availability and multiplying by $100.^5$ A disparity index of 100 indicates an exact match between utilization and availability for a particular group for a specific set of contracts (often referred to as "parity"). A disparity index of less than 100 may indicate a disparity between utilization and availability, and disparities of less than 80 are described in this report as "substantial."

Disparity analysis results for key contract sets are described below.

All transportation contracts. Figure ES-2 presents disparity analysis results for all WSDOT and local agency transportation contracts by study period year. Note that contract-specific DBE goals applied to many of the FHWA-funded contracts that WSDOT and local agencies awarded during the study period. The line down the center of the graph shows a disparity index level of 100, which indicates parity between utilization and availability. Disparity indices of less than 100 indicate disparities between utilization and availability (i.e., underutilization). For reference, a line is also drawn at an index level of 80, because some courts use 80 as a threshold for what indicates a substantial disparity.

As an example, overall, MBE/WBEs did not show a disparity on WSDOT and local agency transportation contracts in FFY 2009. The disparity index of 136 indicates that, considered together, MBE/WBEs received \$1.36 for every one dollar that they would be expected to received based on their availability for WSDOT and local agency work.

An examination of results by group indicates that whereas some groups did not show disparities during the study period, other groups showed substantial disparities, particularly, in FFY 2011.

 Subcontinent Asian American- and Hispanic American-owned businesses showed substantial disparities in each year of the study period.

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⁵ For example, if actual utilization of WBEs on a set of contracts was 2 percent and the availability of WBEs for those contracts was 10 percent, then the disparity index would be 2 percent divided by 10 percent, which would then be multiplied by 100 to equal 20.

⁶ Some courts deem a disparity index below 80 as being "substantial" and have accepted it as evidence of adverse conditions for MBE/WBEs. For example, see *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 B for additional discussion of those and other cases.

- African American-owned businesses and Native American-owned businesses only showed substantial disparities in FFY 2011.⁷
- Neither WBEs nor Asian-Pacific American-owned businesses showed disparities in FFYs 2009, 2010, or 2011.

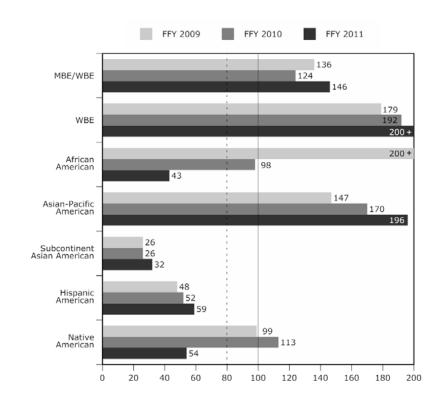
Figure ES-2.
Disparity indices for WSDOT and local agency transportation contracts (FHWA- and state-funded) by study period year

Note:

Number of prime contracts/subcontracts analyzed was 4,244 for FFY 2009, 3,883 for FFY 2010, and 3,258 for FFY 2011. For more detail and results by group, see Figures K-5, K-6, and K-7 in Appendix K.

Source:

BBC Research & Consulting availability and utilization analyses.



Contracts without DBE goals. One way to assess whether a lack of race- and gender-conscious programs affected the participation of MBE/WBEs on WSDOT transportation contracts is to examine any disparities on contracts to which contract-specific DBE goals did not apply. BBC presents disparity analysis results for three types of contracts to which DBE goals did not apply:

- State-funded transportation contracts that WSDOT awarded in FFYs 2009, 2010, and 2011;
- Transportation-related engineering contracts that WSDOT and local agencies awarded in FFYs 2009, 2010, and 2011; and
- FHWA-funded construction contracts that WSDOT awarded between May 9, 2005 and September 30, 2006.

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⁷ Although African American-owned businesses did not show substantial disparities in FFYs 2009 or 2010, most of the dollars that went to African American-owned businesses in FFYs 2009 (approximately \$53 million of \$57 million) and 2010 (approximately \$15 million of \$18 million) went to a single African American-owned electrical contracting firm that was not DBE certified. In some cases, other individual MBE/WBEs also accounted for relatively large proportions of their respective groups' utilization but not nearly to the same extent. For details, see Chapters 6 and 7.

State-funded transportation contracts. In FFYs 2009, 2010, and 2011, WSDOT did not apply contract-specific DBE goals to any state-funded contracts.⁸ Instead, WSDOT applied voluntary MBE/WBE goals to many of those contracts but did not require contractors to meet those goals or show good faith efforts to do so. Figure ES-3 presents disparity analysis results for state-funded WSDOT transportation contracts by study period year.

Figure ES-3.
Disparity indices for WSDOT state-funded transportation contracts by study period year

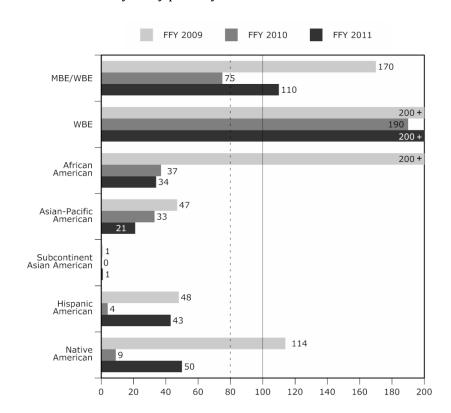
Note:

Number of prime contracts/subcontracts analyzed was 759 for FFY 2009, 798 for FFY 2010, and 507 for FFY 2011.

See Figures K-17, K-18, and K-19 for corresponding disparity results tables.

Source:

BBC Research & Consulting availability and utilization analyses.



- All MBE groups showed substantial disparities on state-funded contracts after FFY 2009.
- African American-owned businesses and Native American-owned businesses were the only two MBE groups that did not show substantial disparities on state-funded contracts in FFY 2009.9
- WBEs did not show substantial disparities in any year of the study period on state-funded contracts.

Transportation-related engineering contracts. During the study period, WSDOT and local agencies only used race- and gender-neutral measures to encourage MBE/WBE/DBE participation on engineering contracts. They did not apply contract-specific DBE goals or voluntary MBE/WBE goals to any engineering contracts, regardless of funding source.

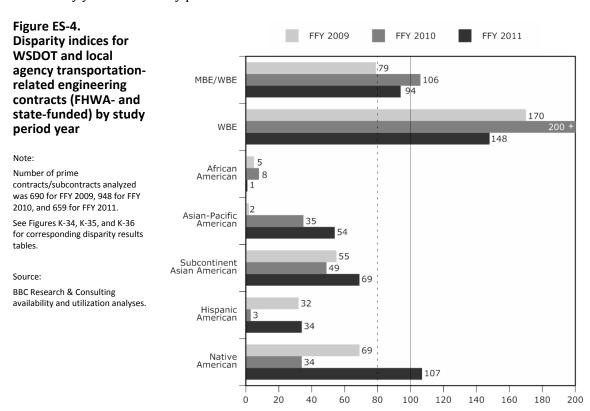
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⁸ WSDOT used to apply race- and gender-conscious contract goals to certain state-funded contracts. However, Initiative 200, passed by Washington voters in 1998, prohibited state agencies from applying race- and gender-conscious measures to those contracts.

⁹ Virtually all of the dollars that went to African American-owned businesses on state-funded contracts in FFY 2009 (\$19.3 million of \$19.6 million) went to a single African American-owned electrical contracting firm that was not DBE certified.

Figure ES-4 presents disparity analysis results for WSDOT and local agency engineering contracts by study period year.

- All MBE groups showed substantial disparities on transportation-related engineering contracts in every year of the study period with the exception of Native American-owned businesses in FFY 2011.
- WBEs did not show substantial disparities on transportation-related engineering contracts in any year of the study period.

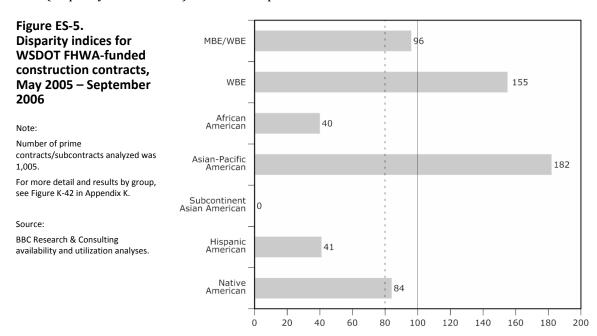


FHWA-funded construction contracts from 2005-2006. BBC also analyzed FHWA-funded construction contracts that WSDOT and local agencies awarded between May 9, 2005 and September 30, 2006. WSDOT did not set DBE contract goals on its FHWA-funded contracts during that time period in response to the May 2005 *Western States Paving Company vs. Washington State DOT* court decision.

Figure ES-5 presents overall disparity analysis results for FHWA-funded construction contracts that WSDOT and local agencies awarded between May 9, 2005 and September 30, 2006. Overall, MBE/WBEs did not exhibit a substantial disparity on those contracts (disparity index of 96). However, results varied for individual MBE/WBE groups:

■ Three MBE groups exhibited substantial disparities on FHWA-funded construction contracts in 2005-2006 — African American-owned businesses (disparity index of 40), Subcontinent American-owned businesses (disparity index of 0), and Hispanic American-owned businesses (disparity index of 41).

- Native American-owned businesses exhibited a disparity index of 84 on those contracts, somewhat higher than the threshold of 80 that some courts use as an indicator of a substantial disparity.
- Neither WBEs (disparity index of 155) nor Asian-Pacific American-owned businesses (disparity index of 182) exhibited disparities on those contracts.



Other information. The study team also examined information concerning the local marketplace, including results by MBE/WBE group, as part of the disparity study. WSDOT should review the full disparity study report, as well as other information it may have, in determining whether it needs to use any race- or gender-conscious measures, and if so, in determining which racial/ethnic and gender groups should be considered eligible for those measures.

Overall DBE Goal

According to 49 CFR Part 26, an agency is required to develop and submit an overall aspirational percentage goal for DBE participation. The goal must be based on demonstrable evidence of the availability of DBEs relative to the availability of all businesses to participate on the agency's USDOT-funded contracts. The agency must try to meet the goal using race- and gender-neutral means and, if necessary, race- and gender-conscious means (or a combination of both).¹⁰

As specified in the Final Rule effective February 28, 2011, an agency is required to submit its overall DBE goal every three years.¹¹ However, the overall DBE goal is an *annual* goal in that an agency must monitor DBE participation in its USDOT-funded contracts every FFY. If DBE participation for a particular FFY is less than the overall DBE goal for that year, then the agency

¹⁰ 49 CFR Sections 26.45, 26.51.

¹¹ http://www.gpo.gov/fdsys/pkg/FR-2011-01-28/html/2011-1531.htm.

must analyze the reasons for the difference, and establish specific measures to address the difference and enable the agency to meet the goal in the next FFY.

WSDOT must prepare and submit an overall DBE goal that is supported by information about the steps that it used to develop the goal. WSDOT is required to next submit a goal for FFYs 2015 through 2017. However, the agency intends on using information from the disparity study to amend its overall DBE goal for FFYs 2012 through 2014.

Federal regulations require WSDOT to establish its overall DBE goal using a two-step process:

- 1. Determine a base figure; and
- 2. Consider a "step-2" adjustment.

Determine a base figure. Establishing a base figure is the first step in calculating an overall DBE goal for WSDOT's FHWA-funded transportation contracts. BBC calculated the base figure by measuring the availability of "potential DBEs" — that is, MBE/WBEs that are DBE-certified or appear that they could be DBE-certified based on revenue requirements described in 49 CFR Part 26. BBC examined the availability of potential DBEs for FHWA-funded prime contracts and subcontracts that WSDOT and local agencies awarded during the study period. BBC's approach to calculating WSDOT's base figure is consistent with relevant court decisions, federal regulations, and USDOT guidance.

BBC's analysis indicates that the availability of potential DBEs for WSDOT's FHWA-funded transportation contracts is 8.4 percent. WSDOT might consider 8.4 percent as the base figure for its overall goal for DBE participation.¹²

Considering a "step-2" adjustment. The Federal DBE Program requires that an agency consider a step-2 adjustment to its base figure as part of determining its overall DBE goal. Factors that an agency should assess in determining whether to make a step-2 adjustment include:

- Current capacity of DBEs to perform agency work, as measured by the volume of work DBEs have performed in recent years;
- Information related to employment, self-employment, education, training, and unions;
- Any disparities in the ability of DBEs to get financing, bonding, and insurance; and
- Other relevant data.¹³

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¹² WSDOT should consider whether the types, sizes, and locations of FHWA-funded contracts that the agency anticipates awarding in the time period that the goal will cover will be similar to the types of FHWA-funded contracts that the agency awarded during the study period.

^{13 49} CFR Section 26.45

Based on information from the disparity study, there are several reasons why WSDOT might consider a higher overall DBE goal than the 8.4 percent base figure:

- WSDOT utilization reports for FFYs 2009 through 2011 indicate median annual DBE participation of 9.4 percent for those years, which is higher than the 8.4 percent base figure. Consistent with USDOT "Tips for Goal-Setting," WSDOT might consider averaging the 8.4 percent base figure and the 9.4 percent past median DBE participation for an overall DBE goal of 8.9 percent.¹⁴
- WSDOT might consider making an upward adjustment to its base figure ranging up to 11.6 percent to account for barriers to business ownership that minorities and women appear to face in the Washington transportation contracting industry (for details, see Chapter 9). Such an adjustment would correspond to a "determination of the level of DBE participation you would expect absent the effects of discrimination."¹⁵
- BBC examined the availability of potential DBEs for FHWA-funded transportation-related construction contracts that WSDOT and local agencies awarded between May 9, 2005 and September 30, 2006. Those contracts were awarded prior to the economic downturn of 2008 and were not affected by American Recovery and Reinvestment Act funds. The types and sizes of transportation contracts that WSDOT and local agencies awarded during that time period may be more representative of the overall mix of FHWA-funded transportation contracts that WSDOT and local agencies anticipate awarding in the future. Potential DBEs would have been available for 14.9 percent of WSDOT's FHWA-funded transportation prime contract and subcontract dollars between May 9, 2005 and September 30, 2006. If WSDOT determines that the mix of the types and sizes of contracts in that time period is representative of future FHWA-funded contracts, then it might consider an upward adjustment to its base figure ranging up to 14.9 percent.
- WSDOT might consider an upward adjustment based on the evidence of barriers that affect minorities, women, and MBE/WBEs in obtaining financing, bonding, and insurance; evidence that certain groups of MBE/WBEs are less successful than comparable non-Hispanic white male-owned businesses; and reported adverse effects of Initiative 200 on MBE/WBEs.
- If WSDOT chose to average the base figure of 8.4 percent, the 9.4 percent past median DBE participation, the 11.6 percent adjusted base figure to account for barriers in business ownership, and the 14.9 percent availability for contracts between May 9, 2005 and September 30, 2006, the result would be an overall goal of 11.1 percent (such averaging would be consistent with certain approaches outlined in "Tips for Goal-Setting").

USDOT "Tips for Goal-Setting" states that an agency is not required to make a step-2 adjustment to its base figure as long as it can explain what factors it considered and can explain its decision in its Goal and Methodology document.

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¹⁴ Tips for Goals Setting in the Disadvantaged Business Enterprise (DBE) Program, http://www.osdbu.dot.gov/dbeprogram/tips.cfm.

¹⁵ 49 CFR Section 26.45 (b).

Whether the DBE Goal Can be Achieved Through Neutral Means

The Federal DBE Program requires WSDOT to assess the percentage of its overall DBE goal that can be achieved through race- and gender-neutral measures, and if necessary, the percentage that can be achieved through race- and gender-conscious measures. USDOT offers guidance concerning how transportation agencies should project the portions of their overall DBE goals that will be met through race- and gender-neutral and race- and gender-conscious measures. USDOT suggests examining four general questions:

- 1. Is there evidence of discrimination within the local transportation contracting marketplace for any racial/ethnic or gender groups?
- 2. What has been the agency's past experience in meeting its overall DBE goal?
- 3. What has DBE participation been when the agency did not use race- or gender-conscious measures?
- 4. What is the extent and effectiveness of race- and gender-neutral measures that the agency could have in place for the next fiscal year?
- **1.** Is there evidence of discrimination within the local transportation contracting marketplace for any racial/ethnic or gender groups? As discussed in detail in Chapter 4, BBC examined conditions in the Washington marketplace, including:
- Entry and advancement;
- Business ownership;
- Access to capital, bonding, and insurance; and
- Success of businesses.

There was quantitative evidence of disparities for MBE/WBEs overall, and for specific groups, concerning the above issues. Qualitative information also indicated some evidence of discrimination affecting the local marketplace. However, some minority and female business owners that the study team interviewed as part of the disparity study did not think their businesses had been affected by any race- or gender-based discrimination.

2. What has been the agency's past experience in meeting its overall DBE goal?

Figure ES-6 presents the participation of certified DBEs on WSDOT transportation contracts in recent years, as presented in WSDOT reports to USDOT. As shown in Figure ES-6, WSDOT has not met its DBE goal in recent years based on awards and commitments to DBE-certified businesses.

Figure ES-6.
WSDOT reported past certified DBE participation on FHWA-funded contracts, FFYs 2009, 2010, and 2011

Sc	l	ır	C	e	

Commitments/Awards reported on WSDOT Uniform Reports of DBE Awards/Commitments and Payments.

FFY	DBE attainment	Annual DBE goal	Difference
2009	9.4 %	15.9 %	-6.5 %
2010	11.6	15.5	-3.9
2011	6.5	15.5	-9.0

3. What has DBE participation been when the agency did not use race- or gender-conscious measures? BBC analyzed a broad range of information to examine certified DBE participation when WSDOT has not applied contract-specific DBE goals.

WSDOT's utilization of DBEs on state-funded contracts. During the study period, WSDOT applied contract-specific DBE goals to many FHWA-funded contracts but did not apply DBE goals to any state-funded contracts. Instead, WSDOT applied voluntary MBE/WBE goals to many state-funded contracts, but did not require contractors to meet those goals or show good faith efforts to do so. Overall, certified DBEs received 2.0 percent of the state-funded transportation contract dollars that WSDOT awarded during the study period.

WSDOT's utilization of DBEs on engineering contracts. WSDOT only used race- and gender-neutral measures to encourage MBE/WBE/DBE participation on engineering contracts during the study period. WSDOT did not apply contract-specific DBE goals or voluntary MBE/WBE goals to any engineering contracts, regardless of funding source. Overall, certified DBEs received 2.6 percent of the transportation-related engineering contract dollars that WSDOT awarded during the study period.

WSDOT's utilization on FHWA-funded construction contracts without goals. BBC analyzed DBE utilization on FHWA-funded construction contracts that WSDOT and local agencies awarded between May 9, 2005 and September 30, 2006. WSDOT did not set DBE contract goals or use any other race-or gender-conscious measures on its USDOT-funded contracts during that time period in response to the May 2005 *Western States Paving Company vs. Washington State DOT* court decision. Overall, certified DBEs received 5.4 percent of the dollars on those contracts.

WSDOT's utilization of DBEs on Public Transportation Division (PTD) contracts. WSDOT administers some FTA-funded construction and engineering contracts through its PTD division. PTD awards FTA-funded grants to local agencies, and they use some of that grant money to fund construction and engineering projects, such as installing bus shelters and building or redesigning transit stations. Local agencies only used race- and gender-neutral measures to encourage MBE/WBE/DBE participation on engineering contracts during the study period. BBC's analyses indicated that there was no utilization of certified DBEs on those contracts during the study period.

4. What is the extent and effectiveness of race- and gender-neutral measures that the agency could have in place for the next fiscal year? When WSDOT is considering the extent to which it could meet its overall DBE goal through race- and gender-neutral measures, it will need to review race- and gender-neutral measures that are already in place as well as neutral measures that it has planned or that could be considered for future implementation. The study team reviewed many of WSDOT's current and planned measures as well as those of other organizations in Washington. The neutral measures that WSDOT and other local agencies currently have in place are extensive. WSDOT plans on continuing to use those measures in the future as well as implementing additional program measures (for details, see Chapter 10). There were several recommendations that business owners and managers made related to those measures as part of in-depth anecdotal interviews, stakeholder meetings, public meetings, and public hearings (for details, see Appendix [).

Measures to Implement the Program

Chapter 11 reviews USDOT requirements for implementation of the Federal DBE Program and identifies potential areas for further WSDOT refinement. Three key potential areas of refinement are discussed below.

Encourage firms to become DBE-certified. Participation of certified DBEs would be higher if more MBE/WBEs that participate on, or are potentially available for, WSDOT and local agency prime contracts and subcontracts would become DBE certified. For example, only 25 percent of the MBE/WBEs that the study team included in the availability database are certified as DBEs (as of January 2012). Many businesses participating in in-depth interviews, public meetings, or public hearings commented on the DBE certification process. Although some business owners gave favorable comments about the OMWBE certification process, several business owners were highly critical about the difficulties and time requirements associated with certification. Some interviewees also said that OMWBE is unfair in its treatment of WBEs that seek DBE certification.

- It appears that many businesses and local agencies are confused about the multiple SBE, MBE, WBE, and DBE programs that Washington agencies operate.
- Representatives of some MBE/WBEs reported that their companies were not DBE-certified because they perceived the process to be difficult or that there would be little benefit from certification.
- Some interviewees reported that they had inquired about certification and were dissuaded from becoming certified after learning about the time and effort required, or about the difficulties for WBEs to become certified if family members were also involved in their businesses.

WSDOT is currently working with OMWBE to develop measures that will further encourage MBE/WBEs that are not DBE-certified to become certified. WSDOT might consider more effectively communicating information about the Federal DBE Program, particularly information about the benefits of DBE certification. It may be effective for WSDOT to coordinate with local agencies that operate similar programs and to verify that the information that OMWBE provides is accurate and current. WSDOT might also consider encouraging OMWBE to examine its staffing, training, and information systems to improve its implementation of the DBE certification process as well as other aspects of the Federal DBE Program.

Need for separate accounting for participation of potential DBEs. In accordance with guidance in the Federal DBE Program, BBC's analysis of the overall DBE goal was based on the combination of DBEs that are currently certified and on MBE/WBEs that could *potentially* be certified. One reason that WSDOT has not met its overall DBE goal in past years, and might not meet it in the future, is that its measurement of DBE participation only includes businesses that are DBE-certified, in accordance with federal regulations. MBE/WBEs that are not DBE-certified are considered in the overall DBE goal but are not counted in the participation reports that are used to measure whether WSDOT has met its overall DBE goal.

USDOT permits agencies to explore whether one reason why they have not met their overall DBE goals is because they are not counting the participation of potential DBEs. USDOT might expect an agency to explore ways to further encourage potential DBEs to become DBE certified as one

way of closing the gap between reported DBE participation and its overall DBE goal. In order to have the information to explore that possibility, WSDOT might consider:

- Developing a system to collect information on the race/ethnicity and gender of the owners of all businesses — not just certified DBEs — that participate in WSDOT and Local Programs contracts;
- Developing internal participation reports of MBE/WBEs (by race/ethnicity and gender) and
 of businesses currently and potentially DBE-certified (based on race/ethnicity and gender
 of ownership; annual revenue; and other factors such as whether the firm has been denied
 DBE certification in the past), for both WSDOT and Local Programs contracts; and
- Continuing to track participation of certified DBEs on FHWA-funded WSDOT and Local Programs contracts, per USDOT reporting requirements.

Exploration of alternative approaches to current DBE contract goals program. Some individuals participating in in-depth interviews, public hearings, and public meetings suggested that WSDOT should explore new ways of implementing the Federal DBE Program that better achieve the objective of further developing MBE/WBEs. They reported that DBE contract goals and the good faith efforts process encourage extensive efforts on the part of prime contractors to document that they have contacted DBEs about subcontracting opportunities, but that the nature of the bidding process makes it difficult to ensure meaningful and substantial participation of DBEs on those contracts.

Issues that participants identified include the following:

- Challenges related to unbundling subcontract elements ahead of time into sizes suitable for DBEs;
- Difficulties meeting DBE contract goals that some prime contractors reported are too high, given the work involved with certain projects and the locations of those projects;
- Difficulties associated with obtaining quotes from DBEs and including them in bid submissions in the final minutes before a bid deadline;
- Tendencies of prime contractors to look to DBEs to perform portions of projects that are easily separated in overall bid packages (e.g., trucking);
- Allegations that prime contractors often use front companies to meet DBE contract goals;
 and
- Challenges associated with selecting DBE subcontractors even if their quotes are higher than those of other subcontractors.

Comments about the Federal DBE Program included the following examples (for details, see Appendix J):

 Several participants indicated that the current DBE contract goals program produces an incentive for prime contractors to use perfunctory good faith efforts processes to comply with the program rather than to seek meaningful participation of DBEs on a project.

- Some owners of smaller DBEs said that new certification size standards were allowing larger DBEs to remain in the program, which adversely affects their businesses. They urged WSDOT to consider steps to limit the program to "true" small businesses.
- Some business owners reported that only a few DBEs get most of the work at the expense of other DBEs.
- Some interviewees reported that front companies have been a barrier to legitimate DBEs.
- Some representatives of non-Hispanic white male-owned businesses and non-certified MBE/WBEs said that WSDOT should eliminate the use of DBE contract goals. Some said that WSDOT should consider using small business goals or other race- and gender-neutral efforts instead of using DBE contract goals.
- Some owners and managers of non-Hispanic white male-owned businesses said that DBE contract goals made it very difficult for their businesses to obtain WSDOT subcontracts.

WSDOT might review such concerns further when evaluating ways to improve its current implementation of the Federal DBE Program. It should also review legal issues, including state contracting laws and whether certain program options would meet USDOT regulations.

Next Steps

The disparity study represents an independent analysis of information related to WSDOT's implementation of the Federal DBE Program. WSDOT should review study results and other relevant information in connection with making decisions concerning its implementation of the Federal DBE Program.

Chapter 11 of the disparity study report provides additional information concerning program elements for WSDOT's consideration. USDOT periodically revises elements of (and regulations related to) the Federal DBE Program and issues guidance concerning implementation of the program. In addition, new court decisions provide insights related to the proper implementation of the Federal DBE Program. WSDOT should closely follow such developments.

CHAPTER 1. Introduction

The Washington State Department of Transportation (WSDOT) is the steward of the State of Washington's transportation system. WSDOT is responsible for building, maintaining, and operating the state highway system. In addition, WSDOT is responsible for most of the state ferry system and works with various partners to maintain and improve local roads, railroads, airports, and multi-modal alternatives to driving. Because WSDOT receives funds from the United States Department of Transportation (USDOT), it must implement the Federal Disadvantaged Business Enterprise (DBE) Program. The Federal DBE Program is designed to address potential discrimination against DBEs in the award and administration of USDOT-funded contracts.

WSDOT retained BBC Research & Consulting (BBC) to conduct a "disparity study" that would provide information to help it implement the Federal DBE Program. A disparity study examines whether there are any disparities between:

- The percentage of contract dollars (including subcontract dollars) that an agency awarded to minority- and women-owned business enterprises (MBE/WBEs) during a particular time period (i.e., utilization);¹ and
- The percentage of contract dollars that MBE/WBEs might be expected to receive based on their availability to perform specific types and sizes of the agency's prime contracts and subcontracts (i.e., availability).

Disparity studies also examine other qualitative and quantitative information related to the legal framework surrounding an agency's implementation of the Federal DBE Program; local marketplace conditions for MBE/WBEs and for other small businesses; and contracting practices and business assistance programs that the agency currently has in place. Disparity studies provide information that can assist an agency in setting its overall aspirational goal for DBE participation and projecting the portion of its goal to be met through race- and gender-neutral means. An agency can use information from a disparity study as it considers specific program measures as part of its implementation of the Federal DBE Program.

USDOT recommends that an agency that is implementing the Federal DBE Program should consider conducting a disparity study for several reasons:

- The types of research that are conducted as part of a disparity study provide information that is useful to an agency for setting its overall aspirational DBE goal and for fine-tuning its implementation of the Federal DBE Program.
- A disparity study often provides insights into how to improve contract opportunities for local small businesses.

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¹ The percentage of contract dollars has been accepted in courts as an appropriate way of examining utilization.

- An independent, objective review of MBE/WBE participation in an agency's contracting is valuable to both agency leadership and to external groups that may be monitoring the agency's contracting practices.
- State and local agencies that have successfully defended their implementations of the Federal DBE Program in court have typically relied on the types of information collected as part of disparity studies.

BBC introduces the 2012 WSDOT disparity study in three parts:

- A. Background;
- B. Study scope; and
- C. BBC study team.

A. Background

As a recipient of USDOT funds — in this case, Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) funds — WSDOT must comply with federal regulations and implement the Federal DBE Program. After enactment of the Transportation Equity Act for the 21st Century (TEA-21) in 1998, USDOT established a new Federal DBE Program for fund recipients to implement. TEA-21 has since been amended and reauthorized ("MAP-21," "SAFETEA" and "SAFETEA-LU").^{2, 3}

Federal regulations in 49 Code of Federal Regulations (CFR) Part 26 guide how state and local governments should implement the Federal DBE Program.⁴ According to those regulations, an agency is required to develop and submit an overall aspirational percentage goal for DBE participation. The goal must be based on demonstrable evidence of the availability of DBEs relative to the availability of all businesses to participate on the agency's USDOT-funded contracts. The agency must try to meet the goal using race- and gender-neutral means or, if necessary, race- and gender-conscious means (or a combination of both).⁵

As specified in the Final Rule effective February 28, 2011, an agency is required to submit its overall DBE goal every three years. However, the overall DBE goal is an *annual* goal in that an agency must monitor DBE participation in its USDOT-funded contracts every federal fiscal year (FFY). If DBE participation for a particular FFY is less than the overall DBE goal for that year,

² Moving Ahead for Progress in the 21st Century Act ("MAP-21"), Pub L. 112-141, H.R. 4348, § 1101(b), July 6, 2012, 126 Stat 405.; preceded by 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.

 $^{^{3}}$ USDOT most recently revised the Federal DBE Program in early 2011.

 $[\]frac{4}{\text{http://ecfr.gpoaccess.gov/cgi/t/text/textidx?region=DIV1:type=boolean;c=ecfr;cc=ecfr;sid=14e071f96d5d61cb9d2410ed5}}{6c59d3d;q1=dbe;rgn1=Section%20Heading;op2=and;rgn2=Section;op3=and;rgn3=Section;view=text;idno=49;node=49%3A1.}\\0.1.1.20:rgn=div5$

⁵ 49 CFR Sections 26.45, 26.51

⁶ http://www.gpo.gov/fdsys/pkg/FR-2011-01-28/html/2011-1531.htm

then the agency must analyze the reasons for the difference, and establish specific measures to address the difference and enable the agency to meet the goal in the next FFY.

Setting an overall goal for DBE participation. Every three years, WSDOT must develop an overall goal for DBE participation in its USDOT-funded contracts. WSDOT's overall goal for DBE participation is aspirational — it does not have to meet the goal and failure to do so does not automatically lead to any penalties. The Federal DBE Program describes the steps an agency must follow in establishing its goal. To begin the goal-setting process, an agency must develop a base figure based on DBE availability or other information. Then, after considering various, related factors, the agency can make an upward, downward, or no adjustment (i.e., a "step-2" adjustment) to its base figure as it determines its overall aspirational DBE goal.

Projecting the portion of the overall DBE goal to be met through neutral means.

According to 49 CFR Part 26, an agency must meet the maximum feasible portion of its overall goal for DBE participation through race- and gender-neutral means. Neutral program measures are measures that are designed to remove potential barriers for all businesses attempting to do work with the agency or measures specifically designed to increase the participation of small or emerging businesses (for examples of race- and gender-neutral program measures, see 49 CFR Section 26.51(b)). If an agency can meet its goal solely through race- and gender-neutral means, it cannot implement race- or gender-conscious measures as part of its program (i.e., measures specifically designed to increase the participation of DBEs and MBE/WBEs, such as DBE or MBE/WBE contracting goals).

Every three years, the Federal DBE Program requires an agency to project the portion of its overall DBE goal that it will meet through neutral measures and the portion that it will meet through any race-or gender-conscious measures. USDOT has outlined a number of factors for an agency to consider when making such determinations.⁸

Determining whether all groups will be eligible for race- or gender-conscious program measures. If an agency determines that race- or gender-conscious program measures are appropriate for its implementation of the Federal DBE Program, then it must also determine which racial/ethnic or gender groups are eligible for participation in those measures. USDOT provides a waiver provision if an agency determines that its implementation of the Federal DBE Program does not need to include certain racial/ethnic or gender groups in the race- or gender-conscious program measures that it implements. For example, some agencies have set contract goals for "underutilized DBEs," which did not include all DBE groups.

Promoting DBE participation as prime contractors. The Federal DBE Program calls for agencies to remove any barriers to DBE participation as prime contractors but does not require agencies to implement programs that give preferences to DBE prime contractors. Quotas are prohibited, but under extreme circumstances, an agency can request USDOT approval to use preference programs related to DBE prime contracting. Small business preference programs,

⁷ 49 CFR Section 26.51

⁸ http://www.dotcr.ost.dot.gov/Documents/Dbe/49CFRPART26.doc

including reserving contracts on which only small businesses can bid as prime contractors, are allowable under the Federal DBE Program.

Legal challenges. Although agencies are required to implement the Federal DBE Program in order to receive USDOT funds, different groups have challenged some of those implementations in court. State transportation departments in California, Illinois, Minnesota, and Nebraska have successfully defended their implementations of the Federal DBE Program and so has a local transportation agency in New Jersey. (Note that the California case is still in the appeals process.) In 2005, WSDOT was not able to successfully defend its implementation of the Federal DBE Program in Western States Paving Company vs. Washington State DOT.9

B. Study Scope

The disparity study provides information that will help WSDOT continue its implementation of the Federal DBE Program, including:

- Establishing a three-year overall aspirational goal for DBE participation in its USDOT-funded contracts:
- Projecting the portion of its overall DBE goal to be met through race- and gender-neutral means and any portion to be met through race- and gender-conscious means;
- Identifying specific racial/ethnic or gender groups that are eligible for any race- or genderconscious program measures; and
- Choosing specific program measures as part of its implementation of the Federal DBE Program.

That information will also be useful to WSDOT as it continues to seek fairness in its contracting and procurement processes, including for non USDOT-funded contracts.

Racial/ethnic and gender groups examined in the study. A DBE is defined in 49 CFR Part 26 as a for-profit small business that is owned and operated by one or more individuals who are socially and economically disadvantaged.¹⁰ There is a gross receipts limit (not more than an average of \$22,410,000 over three years and lower limits for certain lines of business) and a personal net worth limit (\$1.32 million not including equity in the business and in primary personal residence) that businesses and business owners must fall below to be able to be certified as a DBE.11

The Federal DBE Program specifies that the following racial/ethnic and gender groups are presumed to be disadvantaged:

- Black Americans (or "African Americans" in this study);
- Hispanic Americans;

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

¹⁰ 49 CFR Section 26.5

¹¹ USDOT periodically adjusts the gross receipt limits and the personal net worth limit that businesses and business owners must fall below to be able to be certified as a DBE.

- Native Americans;
- Asian-Pacific Americans;
- Subcontinent Asian Americans;
- Women of any race or ethnicity; and
- Any additional groups whose members are designated as socially and economically disadvantaged by the Small Business Administration.

In addition, agencies can consider individuals to be socially and economically disadvantaged on a case-by-case basis. ¹² As long as those businesses and business owners do not exceed revenue and personal net worth limits, they are eligible for DBE certification.

MBE/WBEs, DBEs, and Potential DBEs. BBC includes MBEs and WBEs — regardless of DBE or other certifications — in utilization, availability, disparity, and marketplace analyses. As a result, those analyses pertain to any potential barriers related specifically to the race/ethnicity and gender of business owners.¹³

- The study team uses the terms "MBEs" and "WBEs" to refer to businesses that are owned and controlled by minorities or women (according to the race/ethnicity and gender definitions listed above), regardless of whether they are certified or meet the revenue and net worth requirements for DBE certification and regardless of whether they are certified as MBEs or WBEs through the Washington State Office of Minority and Women's Business Enterprises (OMWBE).¹⁴
- The study team uses the term "DBE" to refer specifically to businesses certified as such through OMWBE, according to the definitions in 49 CFR Part 26.
- The study team uses the term "potential DBE" to refer to MBE/WBEs that are DBE-certified or appear that they could be DBE-certified based on the revenue requirements specified as part of the Federal DBE Program, regardless of actual DBE certification.

Analyses in the disparity study. The disparity study focuses on WSDOT "transportation contracts" — contracts that involved the planning, design, construction, maintenance, or repair of transportation infrastructure. It includes analyses of whether there is a disparity between the utilization and availability of MBE/WBEs. The study team analyzed six types of transportation contracts that WSDOT awarded during the study period:

- FHWA-funded construction contracts awarded in FFYs 2009, 2010, or 2011;
- State-funded construction contracts awarded in FFYs 2009, 2010, or 2011;

¹² White male-owned businesses can also meet the federal certification requirements and be certified as DBEs. However, relatively few DBEs are white male-owned businesses.

 $^{^{13}}$ If the disparity analysis were conducted based only on currently certified DBE/MBE/WBEs, the study team would be unable to draw conclusions about the effectiveness or need for programs to assist MBE/WBEs.

¹⁴ For this study, a WBE is a firm with at least 51 percent ownership and control by non-minority women. Firms owned and controlled by minority women are counted as minority-owned firms.

- FHWA-funded construction contracts awarded between May 9, 2005 and September 30, 2006:
- FHWA-funded engineering contracts awarded in FFYs 2009, 2010, or 2011;
- State-funded engineering contracts awarded in FFYs 2009, 2010, or 2011; and
- FTA-funded construction and engineering contracts that WSDOT awarded through the Public Transit Division (PTD) in FFYs 2009, 2010, or 2011.

Those contract types differed in terms of the measures that WSDOT applied to encourage DBE and MBE/WBE participation on individual contracts. In general, WSDOT applied some combination of the following three types of measures to contracts:

- Contract-specific DBE goals/Good Faith Efforts (GFE);
- Voluntary contract-specific MBE/WBE goals; and
- Race- and gender-neutral measures.

Figure 1-1 presents the types of measures that applied to each of the six types of transportation contracts that the study team analyzed.

Figure 1-1.

Types of measures that applied to the types of transportation contracts that the study team analyzed

Contract type	DBE goals/GFE	Voluntary MBE/WBE goals	Race- and gender- neutral measures
FHWA-funded construction contracts (FFYs 2009, 2010, and 2011)	•		•
State-funded construction contracts (FFYs 2009, 2010, or 2011)		•	•
FHWA-funded construction contracts (May 2005 - September 2006)			•
FHWA-funded engineering contracts (FFYs 2009, 2010, and 2011)			•
State-funded engineering contracts (FFYs 2009, 2010, and 2011)			•
PTD contracts (FFYs 2009, 2010, and 2011)			•

The disparity study also includes reviews of legal issues surrounding the implementation of the Federal DBE Program; local marketplace conditions for MBE/WBEs and for other small businesses; WSDOT's conditions for MBE/WBEs and for other small businesses; WSDOT's contracting practices and local business assistance programs; and other information for WSDOT's consideration as it sets its overall DBE goal and implements other components of the Federal DBE Program. That information is organized in the disparity study report as follows:

Legal framework and analysis. The study team conducted a detailed analysis of relevant federal regulations, case law, state law, and other information to guide the methodology for the disparity study. The analysis included a review of federal requirements related to the Federal DBE Program and an assessment of any state requirements concerning the implementation of the Federal DBE program. The legal framework and analysis for the study are summarized in **Chapter 2** and presented in detail in **Appendix B**.

Data collection and analysis. BBC examined multiple WSDOT data sources — including both electronic and hardcopy data — to complete the utilization and availability analyses. In addition, the study team conducted telephone interviews with thousands of businesses throughout Washington. The scope of the study team's data collection and analysis as it pertains to the utilization and availability analyses is presented in **Chapter 3**.

Marketplace conditions. BBC conducted quantitative analyses of the success of minorities and women and MBE/WBEs throughout Washington's transportation contracting industry. BBC compared business outcomes for minorities, women, and MBE/WBEs to outcomes for non-Hispanic white males and non-Hispanic white male-owned businesses. In addition, the study team collected qualitative information about potential barriers that small businesses and MBE/WBEs face in the Washington transportation contracting industry through in-depth anecdotal interviews, public hearings, and public meetings. Information about marketplace conditions is presented in **Chapter 4 and Appendices E, F, G, H, I, and J.**

Availability analysis. BBC analyzed the percentage of MBE/WBEs that are "ready, willing, and able" to perform on WSDOT transportation prime contracts and subcontracts. That analysis was based on telephone interviews with thousands of Washington businesses that work in industries related to the types of transportation contracting dollars that WSDOT and local agencies award. BBC analyzed availability for specific MBE/WBE groups, types of contracts, and areas of the state. Results from the availability analysis are presented in **Chapter 5 and Appendix C**.

Utilization analysis. BBC analyzed contract dollars that WSDOT and local agencies awarded to MBE/WBEs on transportation contracts executed between October 1, 2008 and September 30, 2011 (i.e., FFYs 2009, 2010, and 2011). Those data included information about associated subcontracts. BBC analyzed contracts that were USDOT-funded and contracts that were solely funded through non-federal sources. Note that WSDOT set contract-specific DBE goals on certain USDOT-funded contracts during those years but not on state-funded contracts.

BBC also analyzed transportation-related construction contracts that WSDOT awarded between May 9, 2005 and September 30, 2006. WSDOT did not set DBE contract goals on its USDOT-funded contracts during that time period in response to the May 2005 *Western States Paving Company vs. Washington State DOT* court decision. It is instructive to compare the utilization of MBE/WBEs on contracts to which DBE goals applied to utilization on contracts to which DBE goals did not apply. Those comparisons are one way to assess the impact of DBE goals on the participation of MBE/WBEs in WSDOT transportation contracts. Results from the utilization analysis are presented in **Chapter 6 and Appendix D**.

 $^{^{15}}$ Note that prime contractors — not WSDOT— actually "award" subcontracts to subcontractors. However, throughout the report, BBC refers to WSDOT as "awarding" subcontracts to simplify those discussions.

Disparity analysis. BBC examined whether there were any disparities between the utilization of MBE/WBEs on transportation contracts that WSDOT and local agencies awarded during the study period and the availability of those businesses for that work. BBC analyzed disparity results for specific MBE/WBE groups, types of contracts, contract roles, and contract sizes. The study team also assessed whether any observed disparities were statistically significant. Results from the disparity analysis are presented in **Chapter 7 and Appendix K.**

Further exploration of disparities. BBC examined potential causes of any disparities between utilization and availability of MBE/WBEs on contracts that WSDOT and local agencies awarded during the study period. Those analyses included comparisons of results for subsets of WSDOT contracts and examinations of bids and proposals for a representative sample of contracts. BBC presents the results of those analyses in **Chapter 8**.

Overall DBE goal. Based on information from the availability analysis and other research, BBC provided WSDOT with information that will help the agency set its three-year overall DBE goal, including the base figure and consideration of a step-2 adjustment. Information about WSDOT's overall DBE goal is presented in **Chapter 9**.

Portion of DBE goal to be met through neutral means. BBC reviewed information regarding evidence of discrimination in the Washington transportation contracting marketplace; analyzed WSDOT's experience with meeting its overall DBE goal; and provided information about WSDOT's past performance in meeting its overall DBE goal using race- and gender-neutral measures. Information from those analyses is presented in **Chapter 10**.

Implementation of the Federal DBE Program. BBC reviewed WSDOT's contracting practices and Federal DBE Program measures. BBC provided guidance related to additional program options and changes to current contracting practices. The study team's review and guidance are presented in **Chapter 11**.

Public engagement. BBC made various efforts to engage the general public and the transportation contracting community in the disparity study process. As part of those efforts, BBC collected qualitative information about marketplace conditions from business owners, trade association representatives, and other knowledgeable individuals. Some of that information is presented as part of **Appendix J**.

Public hearings and project initiation meetings. The study team and WSDOT conducted five public hearings and project initiation meetings in different parts of the state in early 2012. During the first part of each hearing/meeting, the study team gave a presentation describing the disparity study, including information about its purpose, methodology, and schedule. Following the presentation, the study team gave attendees the opportunity to submit verbal testimony about their experiences working in the state, including with private sector organizations and with public sector organizations such as WSDOT, and with forming and growing businesses.

Business organization/trade association meetings. The study team participated in meetings with local business organizations and trade organizations throughout the course of the study. Each meeting involved discussions between the study team and executive committee or other organization members. The study team also gave organization members an opportunity to share their experiences working in the state and with forming and growing their businesses. Those

meetings took place as part of regularly scheduled organization events or as stand-alone meetings specific to the disparity study. The study team met with the following organizations:

- Associated General Contractors of America;
- DBE Practitioners;
- District Council of Laborers;
- Northwest Minority Supplier Diversity Council;
- National Association of Minority Contractors;
- Tabor 100; and
- Washington Asphalt Pavement Association;

On multiple occasions, the study team also attended and participated in meetings with the DBE Advisory Group, which is a group made up of WSDOT staff, trade association representatives, and other stakeholders who periodically meet to discuss issues related to WSDOT's implementation of the Federal DBE Program.

Website. Throughout the project, the study team worked closely with the Office of Equal Opportunity to post disparity study updates and progress information on a separate page of WSDOT's website. The study team was responsible for developing content for the updates, and WSDOT was responsible for posting that information. The webpage provided information about methodology, progress, and schedule, including key upcoming meetings and events.

C. Study Team

The BBC study team was comprised of four firms that, collectively, possess decades of experience related to conducting disparity studies in connection with the Federal DBE Program and state and local MBE/WBE programs.

BBC (prime consultant). BBC is a Denver-based economic and policy research firm. BBC had overall responsibility for the study and performed all of the quantitative analyses.

Keen Independent Research. Keen Independent Research is a Denver-based economic and market research firm that specializes in disparity studies. Keen Independent Research advised on the study and authored and reviewed portions of the final report.

Holland & Knight. Holland & Knight is a national law firm with offices throughout the country. Holland & Knight conducted the legal analysis that provided the basis for this study.

Pacific Communications Consultants (PCC). PCC is a minority- and women-owned communications firm based in Bellevue, Washington. PCC helped to facilitate public meetings in connection with the disparity study and conducted in-depth anecdotal interviews as part of qualitative analyses of marketplace conditions.

CHAPTER 2. Legal Framework

Federal regulations — specifically, 49 Code of Federal Regulations (CFR) Part 26 — set forth the requirements for how state and local government agencies that receive United States Department of Transportation (USDOT) funds must implement the Federal Disadvantaged Business Enterprise (DBE) Program. The legal framework for the Washington State Department of Transportation (WSDOT) disparity study is based on those regulations as well as on U.S. Supreme Court decisions and other federal court rulings. To understand the legal context for the disparity study, it is useful to review:

- A. Race- and gender-conscious and neutral measures of the Federal DBE Program;
- B. Race- and gender-conscious and neutral measures of state and local programs; and
- C. Legal standards that race- and gender-conscious programs must satisfy.

Several non-minority contractors and other groups have filed lawsuits challenging the constitutionality of the Federal DBE Program or the constitutionality of specific agencies' implementations of the Federal DBE Program. For example, contractors have filed lawsuits against state departments of transportations implementing the Federal DBE Program in California, Illinois, Minnesota, Nebraska, and Washington. Implementations of the program were successfully defended in California (thus far), Illinois, Minnesota, and Nebraska but not in Washington. Appendix B provides further analysis of relevant legal decisions and federal regulations.

A. Race- and Gender-Conscious and Neutral Measures of the Federal DBE Program

Regulations that govern an agency's implementation of the Federal DBE Program require that the agency meet the maximum feasible portion of its overall DBE goal through race- and gender-neutral means. Race- and gender-neutral measures include removing barriers to the participation of businesses in general or promoting the participation of small or emerging businesses. If an agency can meet its overall DBE goal solely through race- and gender-neutral means, it must not use race- and gender-conscious measures as part of its implementation of the Federal DBE Program.

If an agency cannot meet its overall DBE goal solely through race- and gender-neutral means, then it is permitted to use race- and gender-conscious program measures — such contract-specific DBE goals — as part of its implementation of the Federal DBE Program.

 $^{^{1}}$ WSDOT also passes USDOT funds on to various cities, counties, and local transportation agencies in Washington, which those local agencies then use to award transportation contracts. USDOT requires WSDOT to apply the Federal DBE Program to those contracts.

² 49 CFR Section 26.51

However, because such program measures are based specifically on the race or gender of business ownership, their use must satisfy certain legal and regulatory standards in order to be valid.

Given that context, general approaches that government agencies that receive USDOT funds could use to implement the Federal DBE Program include:

- 1. Applying a combination of race- and gender-neutral and race- and gender-conscious measures with all certified DBEs eligible for race- and gender-conscious measures. Many agencies use a combination of race- and gender-neutral and race- and gender-conscious measures when implementing the Federal DBE Program. WSDOT currently implements the Federal DBE Program in that manner. On many Federal Highway Administration (FHWA)-funded construction contracts, WSDOT specifies a percentage goal for DBE participation in the contract. Prime contractors that bid on those contracts must commit to a level of DBE participation that would meet the goal or show good faith efforts for having tried to do so.
- **2.** Applying a combination of race- and gender-neutral and more aggressive race- and gender-conscious measures such as DBE set asides in extreme circumstances. The Federal DBE Program provides that a recipient may not set aside contracts for DBEs except in limited and extreme circumstances. An agency may use set asides when no other method could be reasonably expected to redress egregious instances of discrimination.³ However, specific quotas for DBE participation are strictly prohibited under the Federal DBE Program.
- **3.** Applying a combination of race- and gender-neutral and race- and gender-conscious measures, with only certain certified DBEs eligible for race- and gender-conscious measures. Some agencies limit DBE participation in race- and gender-conscious measures to certain racial/ethnic or gender groups based on evidence of those groups facing discrimination within the agencies' respective relevant geographic market areas. For example, in recent years the California Department of Transportation (Caltrans) set contracting goals for "underutilized DBEs (UDBEs)," which did not include all DBE groups. Caltrans counts the participation of all DBEs toward its overall DBE goal, but only UDBEs count toward meeting individual contracting goals. Caltrans determined which DBE groups were UDBEs in large part by examining results of disparity analyses for individual racial/ethnic and gender groups. The Colorado Department of Transportation has operated a similar program for UDBEs.
- **4. Operate an entirely race- and gender-neutral program.** Some agencies have implemented the Federal DBE Program without the use of DBE contract goals or other race- and gender-conscious measures. For example, the Florida Department of Transportation implements the Federal DBE Program using only race- and gender-neutral means.

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³ 49 CFR Section 26.43

B. Race- and Gender-Conscious and Neutral measures of State and Local Programs

In addition to USDOT-funded contracts, WSDOT and other agencies award transportation contracts that are solely funded through state sources. The Federal DBE Program does not apply to those contracts. WSDOT applies minority- and women-owned business enterprise (MBE/WBE) goals to many state-funded contracts in a manner that is very similar to how it sets DBE goals on federally-funded contracts. However, the MBE/WBE goals that WSDOT sets on state -funded contracts are completely voluntary — there are no consequences for prime contractors who fail to meet them or fail to fulfill good faith efforts.

One of the primary reasons that WSDOT only sets voluntary MBE/WBE goals on state-funded contracts is Initiative 200, which Washington voters passed in November 1998 (Initiative 200 became effective in January 1999.). Initiative 200 amended state law to prohibit discrimination and the use of race- and gender-based preferences in public contracting, public employment, and public education. However, Initiative 200 did not prohibit those actions if an agency is required to take them "to establish or maintain eligibility for any federal program, if ineligibility would result in a loss of federal funds to the state." Thus, Initiative 200 prohibited government agencies in Washington from applying race- and gender-conscious measures to state-funded contracts but not necessarily to federally-funded contracts.

Some government agencies nationwide operate programs for their state-funded contracts that have elements that are more similar to DBE contract goals. For example, the Texas Department of Transportation operates a Historically Underutilized Business Program that includes contract goals on certain state-funded projects. The North Carolina Department of Transportation and the Indiana Department of Transportation both apply MBE/WBE programs to their state-funded contracts that mirror the Federal DBE Program.

C. Legal standards that Race- and Gender-Conscious Programs Must Satisfy

The U.S. Supreme Court has established that government programs with race-conscious measures must meet the "strict scrutiny" standard of constitutional review.⁴ The two key U.S. Supreme Court cases 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 adopted by state and local governments;⁵ and
- The 2005 decision in *Adarand Constructors, Inc. v. Peña*, which established the strict scrutiny standard of review for federal race-conscious programs.⁶

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⁴ Certain Federal Courts of Appeal, including the Ninth Circuit Court of Appeals, apply the "intermediate scrutiny" standard to gender-conscious programs. Appendix B describes the intermediate scrutiny standard in detail.

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

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

As described in detail in Appendix B, 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 specific past identified discrimination or its present effects; and
- Establish 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 to meet either one is unconstitutional.

Examples of race-conscious programs that have not satisfied the strict scrutiny standard. Many race-conscious programs have been challenged in court and have been found to be unconstitutional. For example, the *Western States Paving Co. v. Washington State DOT* case is an example of a local government program that was found to not have met the strict scrutiny standard by failing to be narrowly tailored. Appendix B discusses the *Western States Paving Co. v. Washington State DOT* ruling and other related rulings.

Constitutionality of the Federal DBE Program on its face. The Federal DBE Program has been held to be constitutional on its face in legal challenges to date (see discussion in Appendix B of Northern Contracting, Inc. v. Illinois DOT, Sherbrooke Turf, Inc. v. Minn DOT, Gross Seed v. Nebraska Department of Roads, Western States Paving Co. v. Washington State DOT, and Adarand Constructors, Inc. v. Slater).^{7, 8, 9} Some of those court decisions are discussed below.

Northern Contracting, Inc. v. Illinois DOT. In the *Northern Contracting, Inc. v. Illinois DOT* decision, 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 [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." 10

The Seventh Circuit Court of Appeals distinguished both the Ninth Circuit Court of Appeals decision in *Western States Paving Co. v. Washington State DOT* and the Eighth Circuit Court of Appeals decision in *Sherbrooke Turf, Inc. v. Minnesota DOT* relating to an as-applied narrow tailoring analysis:¹¹

⁷ 473 F.3d 715 (7th Cir. 2007).

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

⁹ 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).

^{10 473} F.3d at 722.

¹¹ 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).

- The Seventh Circuit held that 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.¹²
- 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. The court held that Northern Contracting failed to demonstrate that IDOT did not satisfy compliance with the federal regulations.

The Seventh Circuit Court of Appeals affirmed the district court's decision upholding the validity of IDOT's DBE program.

Western States Paving Co. v. Washington State DOT. The constitutionality of the Federal DBE Program was also upheld by the Ninth Circuit Court of Appeals in Western States Paving Co. v. Washington State DOT. However, the Ninth Circuit found that the Washington State DOT failed to show its implementation of the Federal DBE Program to be narrowly tailored. After that ruling, state departments of transportation in Ninth Circuit states operated entirely race- and genderneutral programs until studies could be completed to provide information that would allow them to implement the Federal DBE Program in a narrowly tailored manner. The first court to examine a state implementation of the Federal DBE Program in the Ninth Circuit after the Western States Paving Co. v. Washington State DOT was in Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation, et al., and has thus far found Caltrans' implementation of the Federal DBE Program to be constitutional. 16

Guidance from decisions that have upheld state and local programs. 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 B discusses the successful defense of state and local race-conscious programs, including *Concrete Works of Colorado v. City and County of Denver* (upheld in part) and *H.B. Rowe Company, Inc. v. W. Lyndo Tippett, North Carolina Department of Transportation, et al.*^{17, 18} Appendix B as well as USDOT guidance provide further instruction regarding legal issues in a government agency's implementation of the Federal DBE Program.¹⁹

¹² *Id.* at 722.

¹³ *Id.* at 723-24.

¹⁴ Id.

 $^{^{15}}$ Disparity studies have been completed or are underway for state DOTs in each Ninth Circuit state as well as for many local transit agencies and airports in those states.

¹⁶ Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation, et al., U.S.D.C., E.D.Cal, Civil Action No. S-09-1622, Slip Opinion (E.D. Cal. April 20, 2011). The decision of the district court has been appealed to the Ninth Circuit Court of Appeals.

 $^{^{17}}$ Concrete Works of Colorado v. City and County of Denver, 321 F.3d 950 (10th Cir. 2003), cert. denied, 540 U.S. 1027 (2003).

¹⁸ H.B. Rowe Company., Inc. v. W. Lyndo Tippett, North Carolina Department of Transportation, et al; 589 F. Supp. 2d 587 (E.D.N.C. 2008), appeal pending in the Fourth Circuit Court of Appeals.

¹⁹ http://www.osdbu.dot.gov/DBEProgram/dbeqna.cfm

CHAPTER 3. Collection and Analysis of Contract Data

Chapter 3 provides an overview of Washington State Department of Transportation (WSDOT) and local agency transportation contracts that the study team analyzed as part of the study and describes the process that the study team used to collect information on prime contracts and subcontracts.

Chapter 3 is organized into five parts:

- A. Overview of WSDOT transportation contracts;
- B. Collection and analysis of contract data;
- C. Collection of information on utilized businesses;
- D. Types of work involved in WSDOT transportation contracts; and
- E. Location of businesses performing WSDOT work.

Appendix C provides additional details about the method BBC used to collect and analyze WSDOT contract data.

A. Overview of WSDOT Transportation Contracts

WSDOT uses United States Department of Transportation (USDOT) and state funding to fund transportation-related construction and engineering projects throughout the state of Washington. Examples of such projects include constructing new highways, resurfacing roads, and improving bridges.

Construction. Construction contracts typically involve a prime contractor and several subcontractors. WSDOT's Construction Division awards construction contracts, including construction contracts awarded through the Aviation Division and the Ferries Division. Data from the Construction Division include design/build contracts.

Engineering. For projects that require an engineering or design phase, WSDOT sometimes retains an engineering prime consultant. Engineering prime consultants may retain subconsultants to perform specialized work on design projects such as surveying or mapping. WSDOT's Consultant Services office (CSO) awards engineering contracts.

Local Programs. WSDOT also administers Local Programs using Federal Highway Administration (FHWA) funds. WSDOT's Highways and Local Programs division (H&LP) oversees funding to numerous cities, counties, and regional agencies through Local Programs for the purpose of improving their respective transportation infrastructures and providing transportation services. Local agencies that receive the funding are responsible for awarding and administering the resulting contracts.

Public Transportation Division (PTD). WSDOT administers some Federal Transit Administration (FTA)-funded construction and engineering contracts through PTD. PTD awards FTA-funded grants to local agencies which use most of those dollars in areas that are unrelated to transportation contracting. However, local agencies use some of that grant money to fund transportation-related construction and engineering projects, such as installing bus shelters; building or redesigning transit stations; and developing regional transportation plans.

B. Collection and Analysis of Contract Data

The study team worked with WSDOT staff to collect data on USDOT- and state-funded transportation prime contracts and subcontracts. As a part of that effort, the study team also collected information on contracts that local agencies administered through Local Programs.

Study period. BBC examined transportation contracts that WSDOT and local agencies awarded between October 1, 2008 and September 30, 2011 (i.e., federal fiscal years (FFYs) 2009, 2010, and 2011). In addition, BBC examined transportation-related construction contracts that the Construction Division awarded between May 9, 2005 and September 30, 2006. WSDOT suspended the use of DBE contracting goals on FHWA-funded construction contracts during that time period in response to the *Western States Paving Company vs. Washington State DOT* decision. BBC determined the time period for each contract based on the date of contract award.

Data sources. BBC relied on several sources of information to compile WSDOT prime contract and subcontract information. The study team's data collection methodology is described in detail in Appendix C.

- WSDOT provided the study team with electronic data on transportation-related construction and engineering prime contracts and subcontracts that the agency awarded during the study period. Those contracts were awarded by five different WSDOT divisions the Construction Division, CSO, the Aviation Division, the Ferries Division, and PTD.
 BBC collected information on both USDOT- and state-funded contracts.¹
- The study team collected data on contracts that H&LP administered as part of Local Programs during the study period. The study team worked with WSDOT to contact local agencies that awarded those contracts via e-mail to collect information about corresponding prime contracts and subcontracts.

Total number of WSDOT contracts. The study team identified more than 2,200 transportation prime contracts that WSDOT and local agencies awarded during the study period. Those figures include more than 750 transportation contracts that H&LP administered as part of Local Programs during that time and 12 construction and engineering contracts that local agencies awarded through PTD grants. The contracts that the study team identified accounted for approximately \$6.3 billion of WSDOT spending during the study period. Most of those contracts were suitable for inclusion in the study team's analyses.

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 $^{^{1}}$ WSDOT provided information about whether each construction and engineering contract was USDOT-funded.

Contracts included in the study team's analyses. The study team included transportation-related construction and engineering contracts that WSDOT and local agencies awarded during the study period in its analyses.² For each prime contract and subcontract, the study team determined the prime contractor's "subindustry" (e.g., "highway, street, and tunnel construction") that characterized the firm's primary line of business. BBC identified subindustries based on WSDOT contract data and the primary lines of work of prime contractors and subcontractors. The study team only included those contracts that for-profit businesses performed.

Figure 3-1 presents the number of prime contracts and contract dollars that the study team included in its analyses, including subcontracts. Approximately 81 percent of those contract dollars, or \$5.1 billion, involved USDOT funds. That amount includes contracts that were only partially funded through USDOT.

Figure 3-1. Number of WSDOT and local agency transportation contracts included in the analyses, FFYs 2009 - 2011

BBC Research & Consulting from WSDOT contract data

WSDOT contracts	Number	Dollars (millions)
WSDOT construction contracts		
FHWA-funded	374	\$3,928
State-funded	150	1,008
Total	524	\$4,936
WSDOT Engineering-related contracts		
FHWA-funded contracts	303	\$162
State-funded	664	166
Total	967	\$329
Local assistance contracts		
FHWA-funded contracts	778	\$1,023
State-funded	0	0
Total	778	\$1,023
Total contracts		
FHWA-funded	1,455	\$5,112
State-funded	814	1,175
Total	2,269	\$6,287

The study team also included data on more than 9,000 subcontracts associated with the transportation contracts that WSDOT awarded during the study period. When considering both prime contracts and subcontracts, the study team included 11,385 contract elements in its analyses.

Contracts not included in the study team's analyses. BBC did not include contracts in its analyses that:

WSDOT awarded to nonprofit organizations or to other government agencies;

 $^{^2}$ The study team also separately analyzed transportation-related construction contracts that WSDOT awarded between May 9, 2005 and September 30, 2006.

- Were classified in industries that were not directly related to transportation contracting (e.g., financial services); and
- Were classified in industries for which WSDOT awarded the majority of contracting dollars outside of the "relevant geographic market area" (i.e., outside of the state of Washington).³

Appendix C presents additional information about contracts that the study team did not include in its analyses.

Prime contract and subcontract amounts. For each transportation contract, BBC examined dollars that WSDOT awarded to the prime contractor and the dollars committed to any subcontractors at the time of award.

- If a contract did not include any subcontracts, the study team attributed the entire award amount (including any amendments) to the prime contractor.
- If a contract included subcontracts, the study team calculated subcontract amounts as the total contract amount (at the time of award) committed or budgeted to each subcontractor. BBC then calculated the prime contractor amount as the total award amount less the sum of dollars committed to all subcontractors.

C. Collection of information on Utilized Businesses

The study team collected information on businesses that WSDOT utilized on transportation-related construction and engineering contracts during the study period. BBC relied on a variety of sources for that information, including:

- WSDOT contract and vendor data;
- Washington State Office of Minority and Women's Business Enterprises Directory of Certified Firms;
- Dun & Bradstreet (D&B) business listings and other business information sources;
- Telephone interviews with business owners and managers; and
- WSDOT staff reviews.

The study team compiled the following information about each utilized business:

- Business location:
- Ownership status (i.e., whether each business was minority- or women-owned);
- DBE certification status;
- Primary line of work;
- Year of establishment; and
- Business size (in terms of number of employees and revenue).

³ BBC included the utilization of out-of-state businesses in its analyses, but only in cases where WSDOT awarded contract dollars to out-of-state businesses for work in industries in which the total dollars primarily went to Washington firms.

Appendix C presents additional information about the data that the study team collected on utilized firms.

D. Types of Work Involved in WSDOT Transportation Contracts

The study team determined the subindustries, or specific work types, that were involved in relevant prime contracts and subcontracts. The study team based those determinations on WSDOT contract data; information about each utilized prime contractor's and subcontractor's primary line of work; and the WSDOT work categories in which each business was prequalified. BBC developed subindustries based in part on 8-digit D&B industry classification codes. Figure 3-2 presents the dollars that the study team examined in various transportation subindustries as part of its analyses.

Figure 3-2. WSDOT contract dollars by subindustry, FFYs 2009 - 2011

Industry	Total (in thousand
Construction	
Highway, street, and tunnel construction	\$3,528,752
Bridge and elevated highway construction	969,419
Marine work and dredging	356,924
Electrical work, lighting, and signals	273,096
Excavation, grading, drainage, drilling, and demolition	196,778
Structural steel erection	101,034
Fencing, guardrails, barriers, and signs	76,384
Water, sewer, and utility lines	67,692
Landscaping and erosion control	60,236
Painting, striping, and marking	58,309
Asphalt and concrete supply	29,178
Trucking and hauling	28,393
Heavy construction equipment rental	21,867
Traffic control and flagging services	14,086
Construction sand and gravel	6,343
Other construction	29,216
Other construction supplies	20,987
Total construction	\$5,838,696
Engineering-related	
Engineering	\$574,314
Environmental research and testing services	\$99,502
Construction management	\$28,696
Surveying	\$7,600
Other professional services	\$5,717
Total engineering-related	\$715,828
Total	\$6,554,524

Source: BBC Research & Consulting from WSDOT contract data.

The study team combined related subindustries that accounted for relatively small percentages of total WSDOT contracting dollars during the study period into a single subindustry and labeled it "other construction." For example, the contracting dollars that WSDOT awarded to contractors for "masonry or other stonework" represented less than 1 percent of total WSDOT contract dollars that BBC examined in the study. As a result, BBC combined "masonry or other stonework" with other types of work that also accounted for relatively small percentages of total contracting dollars and that were relatively dissimilar from other subindustries.

E. Location of Businesses Performing WSDOT Work

The Federal DBE program requires agencies to implement the DBE program based on information from the relevant geographic market area — the area in which the agency spends the substantial majority of its contracting dollars. The study team used WSDOT contracting data to help determine the relevant geographic market area for the study.

- The study team summed the dollars going to each prime contractor and subcontractor involved in WSDOT transportation contracts during the study period.
- For each prime contractor and subcontractor, BBC determined whether the business had a location in Washington, based on WSDOT vendor data and additional research.
- BBC then added the transportation contracting dollars that WSDOT awarded to businesses with Washington locations and compared that total with the total transportation contracting dollars that WSDOT awarded during the study period.

Based on that analysis, 95 percent of WSDOT transportation contract dollars during the study period went to businesses with locations in Washington, indicating that the state of Washington should be considered the relevant geographic market area for the study. As a result, BBC's analyses, including the availability analysis and quantitative analyses of marketplace conditions, focused on the state of Washington.

CHAPTER 4. Marketplace Conditions

Federal courts have found that Congress "spent decades compiling evidence of race discrimination in government highway contracting, barriers to the formation of minority-owned construction businesses, and barriers to entry." Congress found that discrimination has impeded the formation and expansion of qualified minority- and women-owned business enterprises (MBE/WBEs). BBC conducted quantitative and qualitative analyses of conditions in the Washington marketplace to examine whether barriers for MBE/WBEs that Congress found on a national level also appear in Washington. BBC analyzed whether barriers exist in the Washington construction and engineering industries for minorities, women, and for MBE/WBEs, and whether such barriers affect the utilization and availability of MBE/WBEs for Washington State Department of Transportation (WSDOT) contracting.

BBC examined conditions in the Washington marketplace in four primary areas:

- A. Entry and advancement;
- B. Business ownership;
- C. Access to capital; and
- D. Success of businesses.

Appendices E through I present quantitative information concerning conditions in the Washington marketplace. Appendix J presents qualitative information that the study team collected through 40 in-depth anecdotal interviews with business owners and others throughout the state; eight meetings that BBC conducted with trade association and businesses organizations; and five public hearings that BBC and WSDOT conducted throughout the state.

A. Entry and Advancement

Several business owners and managers that the study team interviewed as part of the disparity study commented that individuals who form construction and engineering businesses tend to work in those industries before starting their own businesses (for details, see Appendix J). Any barriers related to entry or advancement in the construction and engineering industries may prevent some minorities and women from starting construction and engineering businesses in the state. Several studies throughout the United States have indicated that race and gender discrimination has affected the employment and advancement of certain groups in the construction and engineering industries. The study team examined the representation of minorities and women among all workers in the Washington construction and engineering industries. In addition, for the construction industry, the study team examined the advancement of minorities and women into supervisory and managerial roles. Appendix E presents those results in more detail.

¹ Sherbrooke Turf, Inc. v. Minnesota DOT, 345 F.3d, 970 (8th Cir. 2003) (citing Adarand Constructors, Inc., 228 F.3d at 1167 – 76); Western States Paving Co. v. Washington State DOT, 407 F.3d 983, 992 (9th Cir. 2005).

Quantitative information about entry and advancement in construction. Quantitative analyses of the Washington marketplace — based primarily on data from the 2000 U.S. Census and the 2008-2010 American Community Survey (ACS) — showed that, in general, certain minority groups and women appear to be underrepresented among all workers in the Washington construction industry relative to all industries considered together. In addition, minorities and women appeared to face barriers regarding advancement to supervisory or managerial positions. Analyses of entry and advancement in the Washington construction industry revealed patterns that were similar to those found for the United States as a whole.

Overall representation. African Americans, Asian-Pacific Americans, Subcontinent Asian Americans, and women accounted for a smaller percentage of workers in the Washington construction industry than in all Washington industries in 2008 through 2010.

- African Americans made up 2 percent of workers in the Washington construction industry compared with 4 percent of workers in all Washington industries.
- Asian-Pacific Americans (3%) and Subcontinent Asian Americans (less than 1%) were also underrepresented in the construction industry relative to their representation in all industries.
- Women made up about 12 percent of the workforce in the Washington construction industry compared with 46 percent of the workforce in all Washington industries. Many of the women working in the construction industry appear to hold jobs outside of typical construction trades. In most construction trades in Washington, women made up less than 5 percent of workers.
- About 12 percent of Washington construction workers were Hispanic American compared with 10 percent of workers in all Washington industries. Representation of Native Americans in the Washington construction industry was also similar to the workforce in all industries (2%).

Advancement. Minority and female workers in the Washington construction industry were less likely than non-Hispanic whites and males to advance to the level of first-line supervisor based on data for 2008 through 2010.

- Only 11 percent of first-line supervisors were minorities, less than the percentage of all Washington construction workers that were minorities (20%).
- Similar to that result, women made up only 4 percent of first-line supervisors in the Washington construction industry compared to 12 percent of all workers in the Washington construction industry.
- In addition, minorities and women were generally less likely than non-Hispanic whites and males to advance to the level of construction manager.

Formal education beyond high school is not a prerequisite for most construction jobs. Because the average educational attainment of minorities and women was generally consistent with

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² Data from the 2000 Census were the most current decennial Census data available at the time of this study.

educational requirements for construction jobs, factors other than formal education may explain the relatively low representation of minorities and women among workers in the Washington construction industry and the relatively low representation of minorities and women working in supervisory and managerial roles.

Quantitative information about entry into the engineering industry. BBC also used 2000 U.S. Census data and 2008-2010 ACS data to examine employment and advancement for minorities and women in the Washington engineering industry. As with construction, in general, minorities appear to be underrepresented in the Washington engineering industry. The patterns in Washington were similar to the United States as a whole.

Overall representation. In general, minorities and women accounted for a smaller percentage of workers in the Washington engineering industry than in all Washington industries in 2008 through 2010, even when limiting the analyses to only those individuals with college degrees.

- African Americans made up 2 percent of workers in the Washington engineering industry compared with 3 percent of workers with college degrees in all Washington industries.
- Similar to that result, 8 percent of workers in the Washington engineering industry were Asian-Pacific Americans and 1 percent were Subcontinent Asian Americans compared with 10 percent and 2 percent, respectively, of workers with college degrees in all Washington industries.
- Thirty percent of workers in the Washington engineering industry were women compared with 46 percent of workers with college degrees in all Washington industries. Women represented an even smaller percentage of workers in the Washington civil engineering industry (15%).
- Hispanic Americans' (4%) and Native Americans' (1%) representation in the Washington engineering industry was similar to their representation in all Washington industries.

Qualitative information about entry and advancement. BBC collected qualitative information about entry and advancement in the Washington construction and engineering industries through in-depth interviews, meetings with trade organizations, and public hearings.

Interviewees indicated that construction and engineering businesses are often started by individuals working in those industries or with other connections to those industries. Interviewees reported that construction and engineering companies are typically started (or sometimes purchased) by individuals with connections to the construction or engineering industries.

- Many business owners reported that they worked in the construction or engineering industry before starting their businesses.
- Multiple interviewees indicated that relationships among family members were instrumental in establishing their construction businesses.

Therefore, any barriers to becoming employed in the construction or engineering industry could also affect business ownership.

Some interviewees reported a discriminatory work environment for women and minorities in the construction and engineering industries. Some interviewees reported a discriminatory work environment for women on worksites:

- Some interviewees reported that women in construction have difficulty commanding respect. One female business owner said that, early in the life of her business, people would not talk to her because she was a woman.
- Several interviewees said that there is sexual harassment of women working on job sites.

Some interviewees reported a discriminatory work environment for minorities.

- Several minority business owners said that they had personally experienced racial/ethnic slurs or other discriminatory comments. Some interviewees indicated that such comments were also directed at workers.
- Some interviewees indicated that it was difficult for a minority to be acknowledged as a business owner.

Some interviewees reported that discrimination was more pervasive in the past than it is now.

Effects of entry and advancement. The barriers that minorities and women appear to face entering and advancing within the Washington construction and engineering industries may have substantial effects on business outcomes for MBE/WBEs.

- Typically, employment and advancement are preconditions to business ownership in the construction and engineering industries. Because certain minority groups and women appear to be underrepresented in the Washington construction and engineering industries both in general and as supervisors and managers it follows that such underrepresentation may prevent some minorities and women from ever starting businesses, reducing overall MBE/WBE availability in the local transportation contracting industry.
- Underrepresentation of certain minority groups and women in the Washington construction and engineering industries particularly in supervisory and managerial roles may perpetuate beliefs and stereotypical attitudes that MBE/WBEs may not be as qualified as majority-owned businesses (i.e., non-Hispanic white male-owned businesses). Those beliefs may make it more difficult for MBE/WBEs to win work in Washington, including work with WSDOT.

B. Business Ownership

National research and studies in other states have found that race/ethnicity and gender also affect opportunities for business ownership, even after accounting for race- and gender-neutral factors. Figure 4-1 summarizes how courts have used information from such studies — particularly from regression analyses — when considering the validity of an agency's implementation of the Federal DBE Program.

BBC used regression analyses and data sources that were similar to those used in other studies to analyze business ownership in the Washington transportation contracting industry. BBC used 2008-2010 ACS data to examine whether there are differences in business ownership rates between minorities and women and non-Hispanic whites and males in the Washington construction and engineering industries.

The regression models that the study team developed showed that certain minority groups and women are less likely to own businesses than non-Hispanic whites and males, even after

Figure 4-1. Use of regression analyses of business ownership in defense of the Federal DBE Program

State and federal courts have considered differences in business ownership rates between minorities and women and non-Hispanic whites and males when reviewing the implementation of the Federal DBE Program, particularly when considering DBE goals. For example, disparity studies in Minnesota and Illinois used regression analyses to examine the impact of race/ethnicity and gender on business ownership in the construction and engineering industries. Results from those analyses helped determine whether differences in business ownership exist between minorities and women and non-Hispanic white males after statistically controlling for race- and gender-neutral characteristics. Those analyses, which were based on 2000 Census data, were included in materials submitted to the courts in subsequent litigation concerning the implementation of the Federal DBE Program.

accounting for various personal characteristics including education, age, and the ability to speak English. For those groups that were significantly less likely to own businesses, BBC compared their actual business ownership rates with simulated rates if those groups owned businesses at the same rate as non-Hispanic whites or non-Hispanic white males (in the case of non-Hispanic white women) who share the same race- and gender-neutral personal characteristics.

Appendix F provides details about BBC's quantitative analyses of business ownership rates.

Quantitative information about business ownership in construction. Regression analyses of the Washington construction industry revealed that certain groups were significantly less likely than non-Hispanic whites and males to own construction businesses, even after accounting for various race- and gender-neutral personal characteristics such as education, age, personal net worth, and ability to speak English. Those groups were:

- Hispanic Americans; and
- Non-Hispanic white women.

For each of those groups, Figure 4-2 presents actual business ownership rates and simulated business ownership rates (i.e., "benchmarks") if those groups owned construction businesses at the same rate as non-Hispanic whites or non-Hispanic white males (in the case of non-Hispanic white women) who share the same personal characteristics. 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 the result by 100. Values less than 100 indicate that the group is less likely to own businesses than what would be expected for non-Hispanic whites or non-Hispanic white males who share the same personal characteristics.

Figure 4-2.
Comparison of actual business ownership rates to simulated rates for Washington construction workers, 2008-2010

	Self-emplo	Self-employment rate	
Group	Actual	Benchmark	(100 = parity)
Hispanic American	8.6%	20.8%	41
Non-Hispanic white female	17.1%	25.0%	68

Note: Because benchmarks can only be estimated for records with an observed (rather than imputed) dependent variable, comparisons are made using only that subset of the sample. For that reason, actual self-employment rates may differ slightly from those shown in Figure 4-2.

Source: BBC Research & Consulting from statistical models of 2008-2010 ACS data. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

As shown in Figure 4-2, Hispanic Americans and non-Hispanic white women both own construction businesses at rates that are substantially lower than those of non-Hispanic whites and non-Hispanic white males who share the same personal characteristics. Hispanic Americans own construction businesses at approximately 41 percent of the rate that would be expected for non-Hispanic whites who share the same personal characteristics. Non-Hispanic white women own construction businesses at about two-thirds of the rate (disparity index of 68) that would be expected based on the simulated business ownership rates of non-Hispanic white males who share similar personal characteristics.

Quantitative information about business ownership in engineering. As with construction, BBC examined differences in business ownership rates between minorities and women and non-Hispanic whites and males in the Washington engineering industry. After accounting for various race- and gender-neutral personal characteristics, BBC found that no minority groups were significantly less likely to own engineering businesses than non-Hispanic whites, nor were women less likely to own engineering businesses than non-Hispanic white males. That result does not necessarily indicate that minorities and women have the same opportunities to own businesses in the Washington engineering industry as non-Hispanic white males (for example, see the qualitative information below).

Qualitative information about business ownership. BBC collected qualitative information about business ownership in the Washington construction and engineering industries through in-depth interviews, meetings with trade organizations, and public hearings.

According to most interviewees, the transportation contracting industry in Washington has been dynamic and highly competitive, especially in recent years. It is difficult to start and successfully operate a business within that market. Potential and current business owners who were minority, female, or white male reported facing many of the same challenges. Although owners of small construction and engineering businesses identified many challenges to staying

in business, representatives of large majority-owned businesses also reported difficulties remaining profitable.

Some interviewees indicated additional disadvantages for minorities and women starting or operating businesses in the Washington transportation contracting industry. They cited difficulties associated with the preconditions of starting and maintaining a business such as issues with obtaining financing, bonding, equipment and supplies, and being excluded from industry networks. Some business owners explained the connection between personal assets and the ability to obtain financing, which then impacts successfully starting and expanding a business. Any disadvantages in operating a business can also reduce the number of MBE/WBEs.

Effects of business ownership. The barriers that certain minority groups and women appear to face regarding business ownership may have substantial effects on the current composition of the transportation contracting industry.

- Evidence indicates that certain minority groups and women are less likely than non-Hispanic whites and males to own construction and engineering businesses in Washington. There is also evidence that some MBE/WBEs may have never formed as a result of different barriers related to race/ethnicity, and gender in Washington.
- Chapter 9 provides quantitative analyses of the potential effects of race- and gender-based disparities in business ownership on the availability of MBE/WBEs for transportation contracting work with WSDOT.

C. Access to Capital

Access to capital represents one of the key factors that researchers have examined when studying business formation and success. If race- or gender-based discrimination exists in capital markets, minorities and women may have difficulty acquiring the capital necessary to start or expand a business. BBC examined whether MBE/WBEs have access to capital — both for their homes and for their businesses — that is comparable to that of majority-owned businesses. In addition, the study team examined information about whether minorities and women face any barriers in obtaining bonding and insurance. Appendix G provides details about BBC's quantitative analyses of access to capital, bonding, and insurance.

Quantitative information about homeownership and 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 the potential effects of race/ethnicity on homeownership and on mortgage lending in Washington based on 2008-2010 ACS data and 2010 Home Mortgage Disclosure Act (HMDA) data, respectively.

Homeownership rates. Many studies have documented past discrimination in the national housing market. BBC utilized 2008-2010 ACS data to examine homeownership rates in Washington. Every minority group that the study team examined — African Americans, Asian-Pacific Americans, Subcontinent Asian Americans, Hispanic Americans, Native Americans, and "other" minorities — owned homes in Washington at a lower rate than non-Hispanic whites (68% own homes). Although those differences were all statistically significant, the differences

between non-Hispanic whites and African Americans (35% own homes) and between non-Hispanic whites and Hispanic Americans (45% own homes) were the most pronounced.

BBC also examined median home values among Washington homeowners and found that African American, Hispanic American, and Native American homeowners tend to have lower home values than non-Hispanic white homeowners.

Mortgage lending. If minorities are discriminated against when applying for home mortgages, then they may be denied opportunities to own homes, purchase more expensive homes, or access equity in their homes. The study team explored market conditions for mortgage lending in Washington using 2010 HMDA data. The data indicated that African Americans (19%) and Native Americans (14%) are denied mortgages at substantially higher rates than non-Hispanic whites (10%). There is also evidence suggesting that minorities — particularly African Americans and Hispanic Americans — are generally more likely than non-Hispanic whites 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 MBE/WBEs. To examine the effect of race/ethnicity and 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). Because SSBF records the geographic location of firms by Census Division, not by state, BBC examined data for the Pacific Census Division, which includes Washington, Alaska, California, Hawaii and Oregon.

Business loan approval rates. BBC developed regression models of business loan approvals based on SSBF data to examine outcomes for MBEs and female-owned businesses after statistically controlling for race- and gender-neutral business factors.

- The results from the model indicated that African American- and Hispanic American-owned businesses in the Pacific Census Division were significantly less likely than non-Hispanic white-owned businesses to be approved for business loans.
- Female-owned businesses were no less likely than male-owned businesses to be approved for business loans.

For African American- and Hispanic American-owned business, Figure 4-3 presents actual business loan approval rates and simulated loan approval rates (i.e., "benchmark") if those groups were approved for business loans at the same rate as non-Hispanics white male-owned businesses that share the same race- and gender-neutral business characteristics. The study team calculated a loan approval disparity index for each group by dividing the observed loan approval rate by the benchmark loan approval rate and then multiplying the result by 100. Values less than 100 indicate that, in reality, the group is less likely to be approved for a business loan than what would be expected for non-Hispanic white male-owned businesses that share the same business characteristics.

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³ Data from the 2003 SSBF were the most current SSBF data available at the time of this study.

Figure 4-3 Comparison of actual business loan approval rates to simulated rates ("benchmark"), Pacific Census Division, 1998

	Loan ap	proval rates	Disparity index
Group	Actual	Benchmark	(100 = parity)
African American	46.4%	76.8%	60
Hispanic American	53.7%	75.9%	71

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

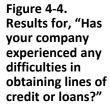
As shown in Figure 4-3, African American- and Hispanic-owned businesses in the Pacific Census Division are approved for business loans at rates that are substantially lower than those of non-Hispanic white male-owned businesses that share the same business characteristics. African American-owned businesses are approved for loans at 60 percent of the rate that would be expected for non-Hispanic white-owned businesses that share the same characteristics. Similar to that result, Hispanic American-owned businesses are approved for loans at 71 percent of the rate that would be expected for non-Hispanic white male-owned businesses that share the same characteristics.

Loan values and interest rates. BBC also examined the average business loan values for businesses that received loans. Data from the 2003 SSBF indicated that minority- and femaleowned businesses in the Pacific Census Division received business loans that were worth, on average, less than two-thirds of the loans that majority-owned businesses received (\$289,000 versus \$456,000). In addition, minority- and female-owned businesses in the Pacific Census Division received business loans that had, on average, higher interest rates than loans that majority-owned businesses received (8.5% versus 6.9%).

Experiences of MBEs, WBEs and majority-owned businesses with obtaining lines of credit and business loans. As part of availability interviews that the study team conducted, BBC asked several questions related to potential barriers or difficulties that businesses have faced in the local marketplace. The interviewer introduced those questions with the following description: "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 in Washington within the past five years as we ask you these questions."

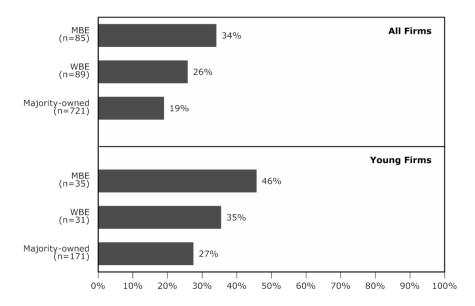
For each potential barrier, the study team examined whether the percentage of businesses that indicated that they had experienced that barrier or difficulty differed among MBEs, WBEs, and majority-owned businesses. The study team also examined if affirmative responses differed for young businesses (i.e., businesses that were 10 years old or younger).

The first question was, "Has your company experienced any difficulties in obtaining lines of credit or loans?" As shown in Figure 4-4, 34 percent of MBEs and 26 percent of WBEs reported difficulties with obtaining lines of credit or loans. Fewer majority-owned businesses (19%) reported that they had experienced difficulties with obtaining lines of credit or loans.



Source:

BBC Research & Consulting from 2012 Availability Interviews.



A larger percentage of young businesses (31%) reported that they had experienced difficulties obtaining lines of credit or loans compared with all businesses (21%). Among young businesses, a larger percentage of MBE/WBEs (41%) reported such difficulties compared with majority-owned businesses (27%).

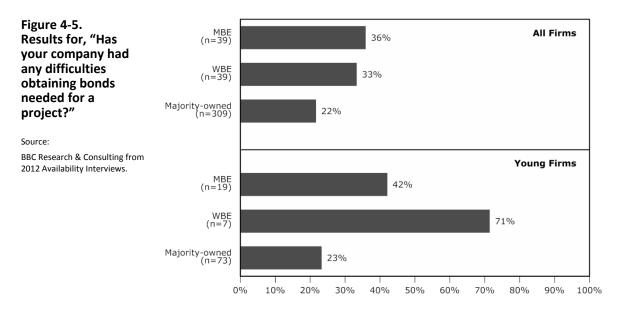
Quantitative information about bonding and insurance. BBC also examined potential barriers that businesses face in obtaining bonding and insurance as part of the availability interviews.

Bonding. To research whether bonding represented a barrier for Washington businesses, BBC asked businesses completing availability interviews the following two questions:

- Has your company obtained or tried to obtain a bond for a project?
- [and if so] Has your company had any difficulties obtaining bonds needed for a project?

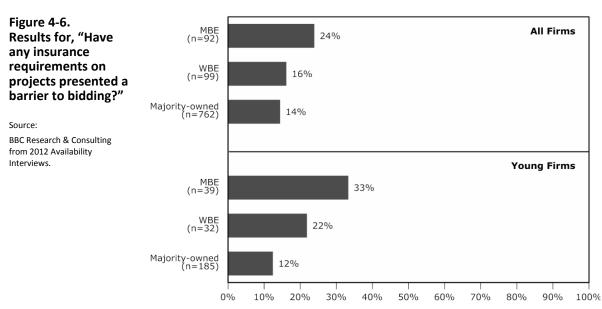
Figure 4-5 presents results for those questions. Among businesses that reported that they had obtained or tried to obtain a bond, 36 percent of MBEs and 33 percent of WBEs indicated difficulties with obtaining bonds. A smaller percentage of majority-owned businesses (22%) reported difficulties with obtaining bonds.

Among young businesses, a larger percentage of MBEs (42%) than majority-owned businesses (23%) reported difficulties with obtaining bonds needed for a project. Compared to all WBEs, a substantially larger percentage of young WBEs (71%) reported difficulties with obtaining bonds, although those results were based on a relatively small number of young WBE respondents.



Insurance. BBC also examined whether MBE/WBEs were more likely than majority-owned businesses to report that insurance requirements presented a barrier to bidding by asking the question, "Have any insurance requirements on projects presented a barrier to bidding?" Figure 4-6 presents those results. Approximately 24 percent of MBEs that the study team interviewed reported such difficulties. A smaller percentage of WBEs (16%) and majority-owned businesses (14%) indicated that insurance requirements presented a barrier to bidding on projects.

Overall, young businesses (16%) were about as likely to report that insurance requirements on projects presented a barrier to bidding compared to all businesses (15%). Young MBEs (33%) and young WBEs (22%) were more likely than young majority-owned businesses (12%) to indicate that insurance requirements presented a barrier to bidding on projects.



Qualitative information about access to capital. BBC collected qualitative information about access to capital for businesses in the Washington transportation contracting industry through in-depth interviews, availability interviews, public meetings with trade organizations, and public hearings.

Many business owners reported that obtaining financing was important in establishing and growing their businesses (including financing for working capital and for equipment), and surviving poor market conditions. Many interviewees indicated that access to financing was a barrier for small businesses in general, especially when starting and first growing. A number of business owners and managers observed that barriers to financing had worsened in the recent economic downturn.

- The Asian-Pacific American owner of a DBE-certified engineering firm said, "If it weren't for the line of credit and personal financing, I think [the firm] would have had to close the doors."
- The vice president of a small DBE construction firm wrote that their bank froze their company's line of credit (in July 2011) and that banks are not loaning to small businesses. "We have contacted over a dozen banks and financing companies since last November and still cannot find one that is willing to help us stay in business."
- The Native American owner of a DBE-certified construction company wrote, "In recent years, [my company] has struggled with providing collateral for its line of credit. ... For many small, minority or women owned firms, coming up with other unencumbered collateral is extremely difficult."

Some business owners explained the connection between personal assets and the ability to obtain financing. For example:

- The white female co-owner of a non-certified construction company said, "Yes, [obtaining financing can be a barrier]. When the downturn came, [our company's] bank got stricter with the credit line. We, [as owners], were forced to use our home equity as collateral for financing."
- The African American owner of a non-certified consulting firm said, "With a lot of real estate underwater, it's hard even [for the business owner] to use [his or her] personal home as equity to obtain a loan. The only equity that a small company can have is the power of its [personnel's] knowledge and experience, but banks don't consider that as collateral."
- The white male owner of a specialty contracting company said, "As an owner-operator in this business, I only own my equipment, and the banks won't loan on equipment. I must finance my business with credit cards and personal loans."

Interviewees had different opinions on whether race or gender affected access to financing. Some minority and female business owners reported no instances of discrimination in obtaining financing. Many business owners indicated it was difficult for small businesses to obtain financing, and that the ability to access business loans was affected by personal wealth. (Note that business size and personal equity may be affected by race or gender discrimination.)

However, some minority business owners indicated that racial- and gender-based discrimination did affect financing. They reported that it was more difficult for minority business owners to obtain financing. For example, the Native American owner of a DBE-certified construction company wrote, "I firmly believe that as [a] minority, I have had to work harder to prove I am capable of performing the work in order to obtain necessary credit"

As discussed above, access to credit can affect the ability to expand a company or remain in business. One interviewee explained a corollary effect. An African American business owner said that discrimination affects companies, which then affects their ability to obtain financing. He said, "If the company doesn't have work and can't keep money in the bank, [it] loses [its] credit rating, [and then can't get the financing that it needs]."

Qualitative information about access to bonding. BBC collected qualitative information about access to bonding in the Washington transportation contracting industry through in-depth interviews, availability interviews, public meetings with trade organizations, and public hearings.

Some business owners and managers indicated that bonding requirements had adversely affected their growth and opportunities to bid on public contracts. For example:

- The African American owner of a non-certified consulting firm said, "[Bonding requirements] are problematic ... on public contracts. [My firm] had to give up pursuing some public projects where the required bond values were high [and my firm could not obtain the bond]."
- The Asian American owner of a DBE-certified construction company wrote, "There are very few, if any, DBE firms that have been able to bid as a prime contractor on any [WSDOT] projects in recent years." He indicated that his firm "can only participate as a prime contractor when sufficient bonding capacity has been attained, and this can only occur by staying in business, participating in projects, and being profitable on those projects."

Many interviewees explained the link between financing and bonding:

- The female co-owner of a non-certified construction company said, "Bonding is definitely a barrier. I don't like the way it's based on credit."
- The female owner of a DBE-certified construction company said that her firm has been unable to obtain bonding, "because ... it's a chicken and egg thing. If you don't have a line of credit, it's really hard to get bonding."

Other interviewees indicated that it is difficult to obtain bonding without sufficient experience, but that it was hard to get that experience without the bonding. For example, the white male owner of an SBA-certified specialty construction company reported, "[Yes], getting bonding is tough. If [the company] can't qualify to do even the smallest jobs, then [it] can never get [its] bonding raised because it is based on experience. ... For [my company], since [it] hasn't done many public jobs, it's hard to get credit for previous experience."

Some interviewees explained that a company's balance sheet and profitability affects its ability to obtain bonding. For example:

- The female owner of a DBE-certified specialty construction firm said, "When [my company] is a prime and has to bond on a public contract, that is very expensive. With the current economy and my company's financials, [its] current bonding company was unwilling to renew the bond. Bond rates are higher when the economy gets worse."
- The female majority owner of a non-certified specialty construction company said, "Our bonding has been very tough, because it's all based on financials. Bonding can be difficult."

Minority and female business owners, in general, said that they did not perceive overt racial or gender discrimination in obtaining bonding. However, the size and capitalization of businesses appears to have an effect on the ability to obtain bonding. They indicated that to the extent that MBE/WBEs are disproportionately small, undercapitalized, have limited access to financing, or have limited experience, bonding is a barrier. For example, the African American owner of a DBE-certified trucking and specialty contracting company said, "If the company doesn't have work and can't keep money in the bank, [it] loses [its] credit rating, [and then can't get the financing or bonding that it needs]."

In addition, one interviewee attributed some of his firm's difficulty with obtaining bonding to discrimination. The Native American owner of a DBE-certified construction company wrote that he believes that racial discrimination has affected his firm's ability to obtain bid, payment, or performance bonds. He also wrote, "I have certainly struggled with those issues in the past, and while I have no direct ability to prove it was tied to my status as a minority, I firmly believe that as [a] minority, I have had to work harder to prove I am capable of performing the work in order to obtain ... bonding."

Qualitative information about access to insurance. The study team asked business owners and managers whether insurance requirements and obtaining insurance presented barriers to doing business.

Many interviewees indicated that that they could obtain necessary insurance, but that the cost was high. Some said that "it's a normal business expense." Owners of small businesses in particular commented on the high cost of insurance for their firms, especially for high-dollar coverage often required by public agencies such as WSDOT.

Some interviewees indicated that the cost of obtaining insurance was so high as to affect the contracts they pursued. For example, the female Asian American principal of an Asian American-owned, MBE/DBE-certified engineering company said, "When they [public agencies] ask for high [insurance] requirements, sometimes [my firm] can't even go after a project."

Insurance requirements appear to affect both prime contractors and subcontractors due to pass-through of insurance requirements on public sector contracts. Examples of such comments include the following:

■ The female manager of a Native American-owned, DBE-certified construction company reported, "[The company has] had to change [its] insurance carrier because of requirements

- of a prime contractor [it has] done a lot of work with. [It] has had to get more insurance coverage doing WSDOT work. [WSDOT] pretty much wants [all contractors] to have the same limits of liability. It's like 'double dip' but the prime [contractor] is making sure that there is no risk at all for [it]."
- Although they did not report problems with insurance requirements for their company, representatives of a large publicly-owned concrete company said, "There are a lot of subcontractors that can't meet certain insurance requirements even by the agencies that [our company] works for."

Effects of access to capital, bonding, and insurance. Potential barriers associated with access to capital, bonding, and insurance may affect various business outcomes for MBE/WBEs.

- There is some quantitative and qualitative evidence indicating that it is more difficult for minorities, women, and MBE/WBEs than it is for non-Hispanic whites, males, and majority-owned businesses to obtain capital, bonding, and insurance, or that barriers to accessing capital, bonding, and insurance disproportionately affect MBEs and WBEs. Such difficulties may reduce the number of MBE/WBEs that form, survive, and grow, which could reduce overall MBE/WBE availability in the Washington transportation contracting industry.
- In addition, access to capital, bonding, and insurance are often required for businesses to pursue certain types of public sector contracts, limiting access to WSDOT and local agency transportation contracts.

D. Success of Businesses

BBC completed quantitative and qualitative analyses that assessed whether the success of MBE/WBEs differs from that of majority-owned businesses in the Washington transportation contracting industry. The study team examined business success in terms of participation in the public and private sector; relative capacity; business closure, expansion, and contraction; and business receipts and earnings. Appendix H provides details about BBC's quantitative analyses of success of businesses. BBC also collected and analyzed information from interviews with business owners and managers and others knowledgeable about the local contracting industry.

Quantitative analysis of participation in the public and private sectors. BBC drew on information from availability interviews to examine any patterns of MBE/WBE and majority-owned business participation in the industry. There was some indication from those data that MBE construction and engineering businesses were less likely to have bid on private sector contracts (either as a prime contractor or as a subcontractor) than majority-owned businesses.

Compared to WBEs (85%) and majority-owned businesses (90%), a smaller percentage of MBEs (82%) reported bidding on private sector construction work in the past five years. Similarly, a smaller percentage of MBEs (81%) than WBEs (92%) and majority-owned businesses (90%) reported bidding on private sector engineering work in the past five years. Those results suggest that barriers to competing for private sector work may have a greater impact on MBEs than on WBEs and majority-owned businesses.

Quantitative analysis of relative capacity. In this study, a firm's "relative capacity" refers to the largest contract or subcontract that the firm bid on or performed in Washington within the five years preceding the time when the study team interviewed the firm. BBC collected capacity information from businesses as part of availability interviews with owners and managers. Availability interview data indicated that, in general, WBEs have lower relative capacities than MBEs and majority-owned businesses in the transportation contracting industry. Further analyses indicated that work specializations and age of business explain those differences. In other words, there was no indication that MBEs or WBEs have lower relative capacities than majority-owned businesses that work in the same industries and that have been in business for the same lengths of time.

Quantitative analysis of business closures, expansions, and contractions. A 2010 SBA report investigated business dynamics and whether minority-owned businesses were more likely to close than other firms. The report included analysis of business closures, contractions, and expansions in Washington between 2002 and 2006.⁴ Data were available for African American-owned businesses, Hispanic American-owned businesses, Asian American-owned businesses, and non-Hispanic white-owned businesses. Those data indicated that African American-owned businesses (38%) and Hispanic American-owned businesses (36%) in Washington closed at substantially higher rates than non-Hispanic white-owned businesses (30%) between 2002 and 2006.

Initiative 200. The SBA data track business closures for the time period following the passing of Initiative 200 in Washington (Initiative 200 became effective in December 1998.). Initiative 200 amended state law to prohibit the use of race- and gender-based preferences in public contracting, public employment, and public education, unless such requirements are required "to establish or maintain eligibility for any federal program, if ineligibility would result in a loss of federal funds to the state." ⁵ Thus, Initiative 200 prohibited government agencies in Washington from applying race- and gender-conscious programs (e.g., contract-specific goals) to state-funded contracts. However, Initiative 200 permits continued implementation of federally-required programs, such as the Federal DBE Program.

Many business owners and others knowledgeable about the Washington transportation contracting industry argue that many MBEs and WBEs closed as a result of Initiative 200 and the prohibition of race- and gender-conscious programs on non-federally-funded contracts (see Appendix J and the discussion about business ownership above). Although SBA data on business closures in Washington may seem to support such arguments, it would be more instructive to compare them with analogous data on business closures prior to the passing of Initiative 200. Along those lines, some academic research that has examined business ownership before and

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⁴ Lowrey, Ying. 2010. "Race/Ethnicity and Establishment Dynamics, 2002-2006." U.S. Small Business Administration Office of Advocacy. Washington D.C. Those data were the most recent business closure, contractions, and expansion data available for Washington at the time of the disparity study.

⁵ RCW 49.60.400(1)

after the passing of Initiative 200 has suggested adverse outcomes for minorities, women, and minority- and women-owned businesses as a result of the measure.⁶

Quantitative analysis of business receipts and earnings. BBC examined several sources of information to analyze business receipts and earnings for Washington businesses.

Business receipts. Analysis of the 2007 Survey of Business Owners (SBO), which was part of the U.S. Census Bureau's 2007 Economic Census, indicate that average receipts for MBE/WBEs were lower than average receipts for businesses owned by non-Hispanic whites and businesses owned by males. African American-owned and Hispanic American-owned businesses showed the lowest average receipts among minority groups. Those differences were evident in the construction industry as well as in the professional, scientific, and technical services industry (which includes engineering).

BBC also analyzed revenue data for businesses in the Washington transportation contracting industry that the study team collected as part of availability interviews. Key results included the following:

- A larger percentage of MBE and WBE construction businesses have annual revenue of only \$1 million or less compared with majority-owned businesses; and
- A smaller percentage of MBEs and WBEs than majority-owned businesses earn relatively high levels of revenue.

Data from the availability interviews, along with data from the 2007 SBO, suggest that MBE/WBEs are more likely to be small businesses than majority-owned businesses.

Business owner earnings. The 2000 U.S. Census of Population and 2008-2010 ACS provide data on the earnings of incorporated and unincorporated business owners age 16 and over who reported positive business earnings. BBC analyzed those data for the construction industry in Washington for 1999 (the time period reported in the 2000 Census) and between 2007 and 2010 (the time period reported in the ACS data). In the Washington construction industry, female owners of construction businesses tended to earn less than male owners. Non-Hispanic minority owners of construction businesses also tended to earn less than non-minority owners but that difference was not statistically significant.

BBC performed regression analyses using 2008-2010 ACS data to examine whether there were differences in business earnings between 2007 and 2010 between minorities and non-Hispanic whites and between women and men after statistically controlling for certain race- and genderneutral personal characteristics.

■ Being female was associated with lower business earnings in the Washington construction industry between 2007 and 2010; and

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⁶ Fairlie, R. & Marion, J. 2007. "Affirmative Action Programs and Business Ownership among Minorities and Women." Ford Foundation and National Economic Development and Law Center.

 Being a Hispanic American was associated with lower business earnings in the Washington construction industry between 2007 and 2010 but the effect was not statistically significant.

Qualitative information about success of businesses. BBC also collected qualitative information about success of businesses in the Washington construction and engineering industries. BBC collected that information through in-depth interviews, availability interviews, public meetings with trade organizations, and public hearings.

Disadvantages for small businesses. Many interviewees indicated that small businesses are at a disadvantage when competing in the transportation contracting industry.

- Some interviewees reported that small businesses have difficulty hiring and retaining employees.
- Some interviewees indicated that business size can affect access to financing.
- Some interviewees reported that small businesses may be at a disadvantage because the
 acquisition of equipment and supplies are affected by the financial health of the company
 and its ability to obtain financing,

In addition, owners and managers of small businesses reported that public agency contracting processes and requirements often put small businesses at a disadvantage when competing for public sector work.

- Some small business owners said that it was more difficult for smaller firms to market and identify contract opportunities.
- Some interviewees reported that public sector bonding requirements can present a barrier to bidding for small construction businesses seeking work as prime contractors and as subcontractors. Some interviewees said that bonding requirements at WSDOT preclude their businesses from bidding on WSDOT contracts.
- Some interviewees indicated that, beyond the barriers associated with bonding, the size of public sector contracts presents a barrier to bidding for many smaller companies.
- Interviewees also identified public sector insurance requirements as a barrier to construction and engineering-relating businesses seeking public sector prime contracts and subcontracts.
- Requirements to pay prevailing wages can also present a barrier to some small businesses that are not union employers.
- Public agencies, including WSDOT, sometimes require construction contractors to prequalify in order to bid on contracts. Some business owners, especially owners of smaller or newly-formed companies, indicated that prequalification can be a barrier to bidding.
- It appears that some businesses choose not to bid on or are precluded from bidding on public sector contracts due to what business owners and managers perceive to be overly restrictive contract requirements. Such requirements can disproportionately affect small businesses.

- Some interviewees reported that overly complicated bidding processes can also present a barrier to firms seeking public sector work. (The white male owner of a construction company said that the difficult bidding process actually helps his company because it removes other businesses as competitors.)
- Some business owners said that public agencies favor bidders and proposers that they already know, affecting opportunities for other businesses.
- Some business owners said that certain public agencies set experience requirements, which can be a barrier to many businesses.
- Slow payment by public agencies (including WSDOT) or by prime contractors (including those on WSDOT contracts) can be especially damaging to small businesses and represent a barrier to performing that work. Business owners and managers also mentioned excessive retainage and delayed final payments on contracts as concerns. Interviewees indicated that slow payment is more of a problem with public sector than with private sector contracts. That barrier can adversely affect small businesses, especially those with limited access to financing.

When availability interview respondents were asked an open-ended question about difficulties starting and expanding a business in their industry or winning work in Washington, many noted large contracts, difficult regulations, and difficulty accessing capital that made it harder for small businesses to be successful in the marketplace.

Impact of recent economic downturn. Many owners and managers of large and small businesses, as well as others in the industry, reported that the recent economic downturn has had an adverse effect on all businesses, but especially small businesses.

- Most interviewees indicated that market conditions since 2008 have made it difficult to stay in business.
- Many business owners and managers said they have seen much more competition during the economic downturn.
- Some business owners said that they have scaled back their operations in response to market conditions in order to stay in business.
- According to interviewees, some businesses survived because they were well-capitalized going into the economic downturn.
- A number of interviewees noted that the slowdown in private sector work resulted in more companies pursuing public sector contracts.
- Some business owners and managers said that economic conditions were improving, but some reported that they had not seen improvement.
- Interviewees reported that large businesses are competing for smaller contracts, which adversely affects small businesses that had relied on that type of work.
- Interviewees also indicated that prime contractors were subcontracting less work and self-performing more as a way of maintaining utilization of their staff and equipment. A number of subcontractors reported that prime contractors were retaining certain types of work that they would have subcontracted out before the economic downturn.

Those types of responses came from in-depth personal interviews, telephone interviews with business owners and managers, stakeholder meetings, and public hearings. For example, when given the opportunity to provide open-ended comments about starting and expanding a business in their industry or winning work in Washington as part of availability telephone interviews, more than 40 business owners and managers participating in the interviews made comments related to the current business climate being difficult.

Impact of disadvantages for small businesses on MBE/WBEs. Because MBE/WBEs are more likely than majority-owned businesses to be small businesses, any barriers for small businesses may have a disproportionate effect on MBEs and WBEs. A number of minority and female business owners indicated that the major barriers that they face are due to the size of their businesses.

Stereotyping, "good ol' boy" network, and other factors potentially affecting MBE/WBEs. In interviews, written comments, and public testimony that the study team analyzed as part of the study, some interviewees indicated difficulties for minorities and women beyond those associated with being a small business. Two of the most frequently mentioned types of barriers related to race and gender were negative stereotypes and the presence of a "good ol' boy" network in the local industry.

- Some interviewees indicated that prime contractors or customers had discriminated against businesses based on race/ethnicity or gender. There was some evidence that some prime contractors hold negative stereotypes concerning MBEs and WBEs.
- Some owners and managers of MBE/WBEs reported that there were double standards for performance of work that adversely affected their companies. Some individuals attributed the double standards to discrimination.
- Some business owners reported that they have been unfairly treated by prime contractors, but noted that it would be hard to know if it was due to discrimination.
- Some interviewees reported that they had specific experiences in which they believed they were treated differently than non-Hispanic whites or men.
- Some interviewees said that working conditions in the industry are sometimes hostile for minorities and women.
- Some business owners reported widespread abuse of the DBE Program through false reporting of DBE participation or through falsifying good faith efforts.

The presence of a "good ol' boy" network affecting the construction and engineering industries in Washington was widely reported across minority, female, and white male interviewees.

- Some of the interviewees discussing the "good ol' boy" network said that it made it more difficult for minorities and women to break into the industry.
- Certain minority and female business owners said that there was a good ol' boy" network, but that, over time, they had been able to enter the network or form their own networks.
- Some interviewees reported that they were not affected by any "good ol' boy" networks.

Views as to whether race- or gender-based discrimination affected MBE/WBEs did not completely align according to the race/ethnicity and gender of the interviewee. Not every minority and female interviewee indicated that discrimination affected the local marketplace today, and some white men said that race- and gender-based discrimination affected MBEs and WBEs. Appendix J presents views from a broad range of business owners and managers and others who are knowledgeable about the Washington transportation contracting industry.

Effects of success of businesses. The differences that the study team observed between MBE/WBEs and majority-owned businesses regarding business success may affect business outcomes for MBE/WBEs in the Washington transportation contracting industry.

- Quantitative and qualitative analyses suggest that, in general, MBE/WBEs may be less successful than majority-owned businesses and they may close at greater rates.
- Disparities in business receipts and earnings for certain MBE/WBE groups may make it difficult for existing MBE/WBEs to obtain the resources to effectively compete for contracts, particularly those contracts that are relatively large in size. Such limitations may affect the number and types of public sector contracts and subcontracts on which MBE/WBEs are able to bid.
- 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 MBE/WBE availability for contracts that WSDOT awarded during the study period. However, combined with information on entry and advancement, business ownership, and access to capital, bonding and insurance, lower business success may reduce the existing availability of MBE/WBEs for WSDOT and local agency transportation contracts.

CHAPTER 5. Availability Analysis

BBC analyzed the availability of minority- and women-owned business enterprises (MBE/WBEs) that are ready, willing, and able to perform on Washington State Department of Transportation (WSDOT) prime contracts and subcontracts. WSDOT can use that and other information from the study to help it implement the Federal Disadvantaged Business Enterprise (DBE) Program. Chapter 5 describes BBC's availability analysis in eight parts:

- A. Purpose of the availability analysis;
- B. Definitions of MBEs, WBEs, certified DBEs, potential DBEs, and majority-owned businesses;
- C. Information collected about potentially available businesses;
- D. Businesses included in the availability database;
- E. MBE/WBE availability calculations on a contract-by-contract basis;
- F. Availability results;
- G. Base figure for WSDOT's overall DBE goal; and
- H. Implications for any DBE contract goals.

Appendix D provides supporting information related to the availability analysis.

A. Purpose of the Availability Analysis

BBC examined the availability of MBE/WBEs for WSDOT and local agency prime contracts and subcontracts for two primary reasons:

- To use as inputs in the disparity analysis; and
- To help develop the base figure for WSDOT's overall DBE goal.

Inputs in the disparity analysis. BBC's analysis of the availability of MBE/WBEs for WSDOT work provides a benchmark against which to compare MBE/WBE utilization in the disparity analysis. In the disparity analysis, BBC compared the percentage of WSDOT contract dollars that went to MBE/WBEs during the study period (i.e., utilization) to the percentage of dollars that might be expected to go to those businesses based on their availability for specific types and sizes of WSDOT contracts (i.e., availability). Comparisons between utilization and availability allowed the study team to determine whether any MBE/WBE groups were underutilized during the study period relative to their availability for WSDOT work.

Base figure for WSDOT's overall DBE goal. WSDOT implements the Federal DBE Program, and, as part of the program, it must establish an overall aspirational goal for DBE participation in its Federal Highway Administration (FHWA)-funded contracts. WSDOT must begin the goal-setting process by calculating a base figure for the availability of DBEs, which can be similar to

determining MBE/WBE availability in a disparity analysis.¹ However, unlike calculating overall availability, the base figure calculation only includes those MBE/WBEs that appear that they would be eligible for DBE certification (i.e., potential DBEs). The Final Rule effective February 28, 2011 and the United States Department of Transportation's (USDOT's) "Tips for Goal-Setting" explain that MBE/WBEs that are not currently certified as DBEs but that could be DBE-certified should be counted as DBEs in the base figure. However, businesses that have been denied certification, have been decertified, or have graduated from the DBE Program should not be counted in the base figure.

B. Definitions of MBEs, WBEs, Certified DBEs, Potential DBEs, and Majority-owned Businesses

To interpret the availability analysis, as well as other analyses presented in the disparity study, it is useful to understand the differences between all MBE/WBEs and MBE/WBEs that are DBE-certified or could be DBE-certified. In addition, it is important to understand how BBC treated businesses owned by minority women.

MBE/WBEs. The definitions that the study team used for MBE/WBE groups in the disparity study were consistent with the definitions specified in 49 Code of Federal Regulations (CFR) Part 26. The study team examined utilization, availability, and disparities separately for African American-, Asian-Pacific American-, Subcontinent Asian American-, Hispanic American-, Native American-, and non-Hispanic white women-owned businesses.

All MBE/WBEs, not only certified DBEs. The study team analyzed the possibility that race-or gender-based discrimination affected the participation of MBE/WBEs in WSDOT work through analyses of availability and utilization based on the race/ethnicity and gender of business ownership and not on DBE certification status. Therefore, the study team counted businesses as minority- or women-owned regardless of whether they were, or could be, certified as DBEs and regardless of whether they were certified as MBEs or WBEs through the Washington State Office of Minority and Women's Business Enterprises (OMWBE). Analyzing the availability and utilization of MBE/WBEs regardless of DBE/MBE/WBE certification allows one to assess whether there are disparities affecting all MBE/WBEs and not just certified businesses. Businesses may be discriminated against because of the race or gender of their owners regardless of whether they have successfully applied for certification.

Moreover, the study team's analyses of whether MBE/WBEs face disadvantages include the most successful, highest-revenue MBE/WBEs. A disparity study that focuses only on MBE/WBEs that are, or could be, DBE-certified would improperly compare outcomes for "economically disadvantaged" businesses with all other businesses, including both non-Hispanic white maleowned businesses and relatively successful MBE/WBEs.² Limiting the analyses to a group of businesses that only includes low-revenue companies would have inappropriately made it more

¹ 49 CFR Section 26.45 (c)

² In addition, 49 CFR Part 26 allows certification of white male-owned businesses as DBEs. Thus, disparity analyses based on certified DBEs might not purely be an analysis of disparities based on race/ethnicity and gender.

likely for the study team to observe disparities for MBE/WBE groups.³ The courts that have reviewed disparity studies have accepted analyses based on race/ethnicity and gender of ownership rather than on DBE certification status.

Certified DBEs. Certified DBEs are businesses that are certified as such through OMWBE, which means that they are businesses that:

- Are owned and controlled by one or more individuals who are presumed to be both socially and economically disadvantaged according to 49 CFR Part 26;⁴ and
- Meet the gross revenue and personal net worth requirements described in 49 CFR Part 26.

Because implementation of the Federal DBE Program requires WSDOT to track DBE utilization, BBC reports utilization results for all MBE/WBEs and separately for those MBE/WBEs that are DBE-certified. However, BBC does not report availability or disparity analysis results separately for certified DBEs.

Businesses owned by minority women. Businesses owned by minority women presented a data coding challenge in the availability and utilization analyses. BBC considered four options for coding businesses owned by minority women:

- Coding those businesses as both minority-owned and women-owned;
- Creating unique groups of minority women-owned businesses;
- Grouping minority women-owned businesses with all other women-owned businesses; and
- Grouping minority women-owned businesses with their corresponding minority groups.

BBC chose not to code businesses as both women-owned and minority-owned to avoid double-counting certain businesses when reporting total MBE/WBE utilization and availability. Creating groups of minority women-owned businesses that were distinct from minority male-owned businesses (e.g., African American women-owned businesses versus African American male-owned businesses) was also unworkable because some minority groups had utilization and availability so low that further disaggregation by gender made it even more difficult to interpret the results.

After rejecting the first two options, BBC then considered whether to group minority womenowned businesses with all other women-owned businesses or with their corresponding minority groups. BBC chose the latter (e.g., grouping African American women-owned businesses with all other African American-owned businesses). Thus, "WBEs" in this report

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³ 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 analyses, any comparison of wages between minorities and non-minorities would more likely show disparities in wage levels.

⁴ The Federal DBE Program specifies that African Americans, Hispanic Americans, Native Americans, Asian-Pacific Americans, Subcontinent Asian Americans, women of any race or ethnicity, and any additional groups whose members are designated as socially and economically disadvantaged by the Small Business Administration are presumed to be disadvantaged.

refers to non-Hispanic white women-owned businesses. The study team's definition of WBE gives WSDOT information to answer questions that sometimes arise pertaining to the utilization of non-Hispanic white women-owned businesses, such as whether the work that goes to MBE/WBEs disproportionately goes to businesses owned by non-Hispanic white women.

Potential DBEs. Potential DBEs are MBE/WBEs that are DBE-certified or appear that they could be DBE-certified based on revenue requirements described in 49 CFR Part 26 (regardless of actual certification). The study team did not count businesses that have been decertified or had graduated from the DBE Program as potential DBEs in this study. BBC examined the availability of potential DBEs as part of helping WSDOT calculate the base figure of its overall DBE goal. Figure 5-1 provides further explanation of BBC's definition of potential DBEs.

Majority-owned businesses. Majority-owned businesses are businesses that are not owned by minorities or women (i.e., businesses owned by non-Hispanic white males). In the utilization and availability analyses, the study team coded each business as minority-, women-, or majority-owned. Majority-owned businesses included any non-Hispanic white male-owned businesses that were certified as DBEs.⁵

All other businesses. The study team categorized all businesses that were not "potential DBEs" as "all other businesses" in the base figure analysis. All other businesses included all MBE/WBEs that were not currently DBE-certified and that:

- Had graduated from the DBE Program;
- Had been denied DBE certification; or
- Appeared to be too large for DBE certification based on revenue size standards in 2012.

Figure 5-1. Definition of potential DBEs

To help WSDOT calculate its overall DBE goal, BBC did not include the following types of MBE/WBEs in its definition of potential DBEs:

- MBE/WBEs that had graduated from the DBE Program and not been recertified;
- MBE/WBEs that are not currently DBEcertified that had applied for certification with OMWBE and had been denied; and
- MBE/WBEs that are not currently DBEcertified that appeared to have average annual revenues over the most recent three years so high as to deem them ineligible for DBE certification.

At the time of this study, the overall revenue limit for DBE certification was \$22,410,000 based on a three-year average of gross receipts. There were lower revenue limits for specific subindustries according to the U.S. Small Business Administration (SBA) small business size standards. Only a few MBE/WBEs appeared to have exceeded those revenue limits based on information that they provided as part of availability interviews. The revenue categories used to classify firms reflect recent changes to the Table of Small Business Size Standards published by the SBA.

Business owners must also meet USDOT personal net worth limits for their businesses to qualify for DBE certification. The personal net worth of business owners was not available as part of this study and thus was not considered when determining potential DBE status.

All other businesses also included majority-owned businesses that were not DBE-certified, which was all majority-owned businesses.

⁵ There were no DBE-certified white male-owned businesses that were utilized on or potentially available for WSDOT transportation contracts.

C. Information Collected about Potentially Available Businesses

BBC's availability analysis focused on specific areas of work (i.e., subindustries) related to the types of transportation-related construction and engineering contracts that WSDOT awarded during the study period. BBC identified specific subindustries for inclusion in the availability

analysis and identified the geographic market areas in which WSDOT awarded most of the corresponding contract dollars (i.e., the relevant geographic market area). BBC considered the state of Washington as the relevant geographic market area for the study. The study team then developed a database of potentially available businesses through interviews with local business establishments within relevant subindustries. That method of examining availability is sometimes referred to as a "custom census" and has been accepted in federal court. Figure 5-2 summarizes characteristics of BBC's custom census approach to examining availability.

Overview of availability interviews. The study team conducted telephone interviews with business owners and managers to identify businesses that are potentially available for WSDOT transportation prime contracts and subcontracts. ⁶ BBC began the interview process by collecting information about business establishments from Dun & Bradstreet (D&B)

Figure 5-2. Summary of the strengths of BBC's "custom census" approach

Federal courts have reviewed and upheld "custom census" approaches to examining availability. Compared with some other previous court-reviewed custom census approaches, BBC added several layers of screening to determine which businesses are potentially available for work in the transportation contracting industry in Washington.

For example, the BBC analysis included discussions with businesses about interest in state and local government work, contract role, and geographic locations of their work — items not included in some of the previous court-reviewed custom census approaches. BBC also analyzed the sizes of contracts and subcontracts on which businesses have bid on or performed in the past.

Marketplace listings. BBC collected information about all business establishments listed under 8-digit work specialization codes (as developed by D&B) that were most related to the transportation contracts that WSDOT and local agencies awarded during the study period. D&B provided 15,860 business listings related to those work specialization codes.

Information collected in availability interviews. BBC worked with Customer Research International (CRI) to conduct telephone interviews with the owners or managers of the identified business establishments. Interview questions covered many topics about each organization, including:

- Status as a private business (as opposed to a public agency or not-for-profit organization);
- Status as a subsidiary or branch of another company;
- Primary lines of work;
- Qualifications and interest in performing transportation-related work for WSDOT and other state and local government agencies;

⁶ The study team offered business representatives the option of completing interviews via fax or e-mail if they preferred not to complete interviews via telephone.

⁷ D&B Marketplace is accepted as the most comprehensive and complete source of business listings in the nation.

- Qualifications and interest in performing transportation-related work as a prime contractor or as a subcontractor;
- Ability to work in specific geographic regions of Washington;
- Largest prime contract or subcontract bid on or performed in the previous five years;
- Year of establishment; and
- Race/ethnicity and gender of ownership.

Appendix D provides details about specific interview questions and an example of the availability interview instrument.

Considering businesses as potentially available. CRI asked business owners and managers that they successfully contacted several questions concerning the types of work that their companies performed; their past bidding histories; and their qualifications and interest in working on contracts for WSDOT and other state and local government agencies, among other topics. BBC considered businesses to be potentially available for WSDOT transportation prime contracts or subcontracts if they reported possessing *all* of the following characteristics:

- a. Being a private business (as opposed to a nonprofit organization);
- b. Having performed work relevant to WSDOT transportation contracting;
- c. Having bid on or performed transportation-related public or private sector prime contracts or subcontracts in Washington in the past five years; and
- d. Being qualified for and interested in work for WSDOT and other state or local governments.⁸

BBC also considered the following information to determine if businesses were potentially available for specific contracts that WSDOT awarded during the study period:

- e. The ability to work in specific regions of Washington;
- f. The largest contract bid on or performed in the past; and
- g. The year the business was established.

D. Businesses Included in the Availability Database

After conducting availability interviews with thousands of Washington businesses, the study team developed a database of information about businesses that are potentially available for WSDOT transportation contracting work. The study team used the availability database to produce availability benchmarks to:

- Determine whether there were any disparities in WSDOT's utilization of MBE/WBEs during the study period; and
- Help calculate a base figure for WSDOT's overall DBE goal.

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 $^{^{\}rm 8}$ That information was gathered separately for prime contract and subcontract work.

Data from the availability interviews allowed BBC to develop a representative depiction of businesses that are qualified and interested in WSDOT work, but it should not be considered an exhaustive list of every business that could potentially participate in WSDOT transportation work. Appendix D provides a detailed discussion about why the database should not be considered an exhaustive list of potentially available businesses.

Figure 5-3 presents the number of businesses that the study team included in the availability database for each racial/ethnic and gender group. The information in Figure 5-3 solely reflects a simple count of firms with no analysis of availability for specific WSDOT contracts. Thus, it represents only a first step toward analyzing the availability of MBE/WBEs for WSDOT work.

Figure 5-3.

Number of businesses included in the availability database

Note:

Numbers rounded to nearest tenth of 1 percent.

Numbers may not add to totals due to rounding.

Source

BBC Research & Consulting availability analysis.

Race/ethnicity and gender	Number of firms	Percent of firms
African American-owned	15	1.5 %
Asian-Pacific American-owned	18	1.8
Subcontinent Asian American-owned	4	0.4
Hispanic American-owned	29	2.9
Native American-owned	29	2.9
Total MBE	95	9.6 %
WBE (white women-owned)	100	10.1
Total MBE/WBE	195	19.7 %
Total majority-owned firms	793	80.3
Total firms	988	100.0 %

As shown in Figure 5-3, the study team considered 988 businesses to be potentially available for specific transportation contracts that WSDOT and local agencies awarded during the study period. Of those businesses, 195 (20%) were MBEs or WBEs.

E. MBE/WBE Availability Calculations on a Contract-by-Contract Basis

BBC analyzed information from the availability database to develop dollar-weighted availability estimates for use in the disparity analysis and in helping WSDOT set its overall DBE goal. Dollar-weighted availability estimates represent the percentage of WSDOT transportation contracting dollars that MBE/WBEs would be expected to receive based on their availability for specific types and sizes of WSDOT transportation-related construction and engineering prime contracts and subcontracts. BBC's approach to calculating availability was a bottom up, contract-by-contract "matching" approach.

Steps to calculating availability. Only a proportion of the businesses in the availability database were considered potentially available for any given WSDOT construction or engineering prime contract or subcontract (referred to collectively as "contract elements"). BBC first examined the characteristics of each specific contract element, including type of work, location of work, contract size, and contract date. BBC then identified businesses in the availability database that perform work of that type, in that location, of that size, in that role (i.e., prime contractor or subcontractor), and that were in business in the year that the contract element was awarded.

BBC identified the specific characteristics of each of the 11,385 WSDOT prime contracts and subcontracts that the study team examined as part of the disparity study and then took the following steps to calculate availability for each contract element:

- 1. For each contract element, the study team identified businesses in the availability database that reported that they:
 - Are qualified and interested in performing transportation-related work in that particular role for that specific type of work for WSDOT and other local agencies;
 - ➤ Are able to serve customers in that geographic location;
 - ➤ Have bid on or performed work of that size; and
 - ➤ Were in business in the year that WSDOT awarded the contract.
- 2. The study team then counted the number of MBEs (by race/ethnicity), WBEs, and majority-owned businesses among all businesses in the availability database that met the criteria specified in Step 1.
- 3. The study team translated the numeric availability of businesses for the contract element into percentage availability.

BBC repeated those steps for each contract element that the study team examined as part of the disparity study. BBC multiplied the percentage availability for each contract element by the dollars associated with the contract element, added results across all contract elements, and divided by the total dollars for all contract elements. The result was a dollar-weighted estimate of overall availability of MBE/WBEs and estimates of availability for each MBE/WBE group. Figure 5-4 provides an example of how BBC calculated availability for a specific subcontract associated with a construction prime contract that WSDOT awarded during the study period.

Improvements on a simple "head count" of businesses. BBC used a custom census approach to calculating MBE/WBE availability for WSDOT work rather than using a simple "head count" of MBE/WBEs (i.e., simply calculating the

Figure 5-4. Example of an availability calculation for a WSDOT subcontract

On a contract that WSDOT awarded in 2011 for work in Northwestern Washington, the prime contractor awarded a subcontract worth \$444,117 for highway and street construction work. To determine the overall availability of MBE/WBEs for that subcontract, the study team identified businesses in the availability database that:

- a. Were in business in 2011;
- Indicated that they performed highway and street construction work;
- c. Reported bidding on work of similar or greater size in the past;
- d. Reported ability to perform work in Northwestern Washington; and
- d. Reported qualifications and interest in working as a subcontractor on WSDOT and other local agency transportation projects.

The study team found 200 businesses in the availability database that met those criteria. Of those businesses, 48 were MBEs or WBEs. Thus, MBE/WBE availability for the subcontract was 24 percent (i.e., 48/200 X 100 = 24).

percentage of all Washington transportation contracting businesses that are minority- or women-owned). Using a custom census approach typically results in lower availability estimates for MBEs and WBEs than a headcount approach due in large part to BBC's

consideration of "relative capacity" in measuring availability and to dollar-weighting availability results. MBE/WBEs tend to be smaller than other businesses, and the largest contracts that they have bid on or performed also tend to be smaller than those of other businesses. Therefore, MBE/WBEs are less likely to be identified as available for the largest prime contracts and subcontracts.

There are several important ways in which BBC's custom census approach to measuring availability is more precise than completing a simple head count.

BBC's approach accounts for type of work. USDOT suggests calculating availability based on businesses' abilities to perform specific types of work. USDOT gives the following example in "Tips for Goal-Setting in the Disadvantaged Business Enterprise (DBE) Program:"

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 businesses that are MBEs or WBEs and the percentage of trucking businesses 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.⁹

The BBC study team took type of work into account by examining 22 different subindustries related to construction and engineering as part of estimating availability for WSDOT work.

BBC's approach accounts for qualifications and interest in transportation-related prime contract and subcontract work. The study team collected information on whether businesses are qualified and interested in working as prime contractors, subcontractors, or both on WSDOT transportation work, in addition to the consideration of several other factors related to WSDOT prime contracts and subcontracts (e.g., contract types, sizes, and locations):

- Only businesses that reported being qualified for and interested in working as prime contractors were counted as available for prime contracts;
- Only businesses that reported being qualified for and interested in working as subcontractors were counted as available for subcontracts; and
- Businesses that reported being qualified for and interested in working as both prime contractors and subcontractors were counted as available for both prime contracts and subcontracts.

BBC's approach accounts for the size of prime contracts and subcontracts. BBC considered the size — in terms of dollar value — of the prime contracts and subcontracts that a business bid on or received in the previous five years (i.e., relative capacity) when determining whether to count that business as available for a particular contract element. When counting available businesses for a particular prime contract or subcontract, BBC considered whether businesses had previously bid on or received at least one contract of an equivalent or greater dollar value.

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⁹ Tips for Goals Setting in the Disadvantaged Business Enterprise (DBE) Program, http://www.osdbu.dot.gov/dbeprogram/tips.cfm

BBC's approach is consistent with many recent, key court decisions that have found relative capacity measures to be important to measuring availability (e.g., *Western States Paving Company v. Washington State DOT, Rothe Development Corp. v. U.S. Department of Defense*, ¹⁰ and *Engineering Contractors Association of S. Fla. Inc. vs. Metro Dade County* ¹¹).

BBC's approach accounts for the geographic location of the work. WSDOT provided information on the location in which contracts that it awarded during the study period were performed. As part of the availability interviews, the study team collected information on whether businesses could perform work in the following WSDOT-defined regions:

- Olympic Region. The Olympic Region includes Clallam, Grays Harbor, Jefferson, Kitsap, Mason, Pierce, and Thurston counties.
- Southwest Region. The Southwest Region includes Clark, Cowlitz, Klickitat, Lewis, Pacific, Skamania, and Wahkiakum counties.
- Northwest Region. The Northwest region includes King, Skagit, Snohomish, and Whatcom counties.
- *North Central Region.* The North Central Region includes Chelan, Douglas, Grant, and Okanogan counties.
- *South Central Region.* The South Central Region includes Asotin, Benton, Columbia, Franklin, Garfield, Kittitas, Walla Walla, and Yakima counties.
- *Eastern Region.* The Eastern Region includes Adams, Ferry, Lincoln, Pend Oreille, Spokane, Stevens, and Whitman counties.

BBC's approach generates dollar-weighted results. BBC examined availability on a contract-by-contract basis and then dollar-weighted the results for different sets of contract elements. Thus, the results of relatively large contract elements contributed more to overall availability estimates than those of relatively small contract elements. BBC's approach is consistent with USDOT's "Tips for Goal-Setting in the Disadvantaged Business Enterprise (DBE) Program," which suggests a dollar-weighted approach to calculating availability.

F. Availability Results

BBC used a custom census approach to estimate the availability of MBE/WBEs and majority-owned businesses for the 11,385 transportation-related construction and engineering prime contracts and subcontracts that WSDOT and local agencies awarded during the study period. Figure 5-5 presents overall dollar-weighted availability estimates by MBE/WBE group for those contracts.

Overall, MBE/WBE availability for WSDOT transportation contracts is 8.7 percent. WBEs (2.9%), Hispanic American-owned businesses (1.9%), and Native American-owned businesses (1.8%) exhibited the highest availability percentages among all MBE/WBE groups. Note that availability estimates varied when the study team examined different subsets of those contracts.

¹⁰ Rothe Development Corp. v. U.S. Department of Defense, 545 F.3d 1023 (Fed. Cir. 2008).

 $^{^{11}\ \}textit{Engineering Contractors Association of S. Fla.\ Inc.\ vs.\ Metro\ Dade\ County}, 943\ F.\ Supp.\ 1546\ (S.D.\ Fla.\ 1996).$

Figure 5-5.
Overall dollar-weighted availability estimates by MBE/WBE group

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Numbers rounded to nearest tenth of 1 percent. Numbers may not add to totals due to rounding. For more detail and results by group, see Figure K-2 in Appendix K.

Source:

BBC Research & Consulting availability analysis.

Race/ethnicity and gender	Utilization benchmark (availability %)
African American-owned	0.9 %
Asian-Pacific American-owned	0.6
Subcontinent Asian American-owned	0.6
Hispanic American-owned	1.9
Native American-owned	1.8
Total MBE	5.8 %
WBE (white women-owned)	2.9
Total MBE/WBE	8.7 %

Availability by region. BBC grouped the six WSDOT regions into three distinct areas of the state:

- Northwestern Washington, which includes the Olympic and Northwest regions;
- **Eastern Washington**, which includes the North Central and Eastern regions; and
- Southern Washington, which includes the South Central and Southwest regions.

Figure 5-6 presents overall dollar-weighted availability estimates by group and by area of the state. As shown in Figure 5-6, overall MBE/WBE availability was highest in Eastern Washington and lowest in Northwestern Washington. WBE availability was particularly high in Eastern and Southern Washington.

Figure 5-6.

Overall dollar-weighted availability estimates by MBE/WBE group and by area of the state

		Area of the state	
Race/ethnicity and gender	Northwestern	Eastern	Southern
African American-owned	0.9 %	0.5 %	1.4 %
Asian-Pacific American-owned	0.5	1.6	0.9
Subcontinent Asian American-owned	0.5	0.7	0.9
Hispanic American-owned	1.5	3.5	3.0
Native American-owned	1.4	3.7	3.2
Total MBE	4.8 %	9.9 %	9.3 %
WBE (white women-owned)	2.4	5.4	4.0
Total MBE/WBE	7.2 %	15.4 %	13.4 %

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

Number of prime contracts/subcontracts analyzed was 7,601 in Northwestern Washington,

1,406 in Eastern Washington, and 2,378 in Southern Washington.

For more detail and results by group, see Figures K-20, K-21, and K-22 in Appendix K.

Source: BBC Research & Consulting availability analysis.

One potential reason why MBE/WBE availability in Northwestern Washington is lower than in Eastern and Southern Washington is contract size. The contracts that WSDOT and local agencies awarded in Northwestern Washington during the study period tended to be larger in size than the contracts that they awarded in Eastern and Southern Washington. For example, the 10 largest contracts that WSDOT and local agencies awarded during the study period — ranging in size from \$85 million to \$1.1 billion — were all performed in Northwestern Washington. Contracts of that size may be less accessible to MBE/WBEs, which tend to be smaller than majority-owned businesses and tend to have smaller relative capacities. 12

G. Base Figure for WSDOT's Overall DBE Goal

Establishing a base figure is the first step in calculating an overall goal for DBE participation in WSDOT's USDOT-funded transportation contracts. BBC calculated the base figure using the same availability database and approach described above except that calculations only included potential DBEs (including currently certified DBEs) and only included USDOT-funded prime contracts and subcontracts. BBC's approach to calculating WSDOT's base figure is consistent with:

- Court-reviewed methodologies in several states, including Washington, California, Illinois, and Minnesota;
- Instructions in The Final Rule effective February 28, 2011 that outline revisions to the Federal DBE Program; and
- USDOT's "Tips for Goal-Setting in the Disadvantaged Business Enterprise (DBE) Program."

For details about WSDOT's base figure for its overall DBE goal, see Chapter 9.

Base figure for FHWA-funded contracts. BBC's availability analysis indicates that the availability of potential DBEs for WSDOT's FHWA-funded transportation contracts is 8.4 percent. WSDOT might consider 8.4 percent as the base figure for its overall goal for DBE participation, assuming that the types, sizes, and locations of FHWA-funded contracts that the agency awards in the time period that the goal will cover are similar to the types of FHWA-funded contracts that the agency awarded during the study period.

Differences from overall MBE/WBE availability. The availability of potential DBEs for FHWA-funded contracts is slightly less than the overall MBE/WBE availability presented in Figure 5-5. BBC's calculation of overall MBE/WBE availability includes three groups of MBE/WBEs that the study team did not count as potential DBEs when calculating the base figure:

- MBE/WBEs that graduated from the DBE Program (that were not recertified);
- MBE/WBEs that are not currently DBE-certified that had applied for DBE certification with OMWBE and had been denied; and

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 $^{^{12}}$ Note that a business did not have to be *located* in a particular area of Washington in order for it to be considered potentially available for contracts that took place there. However, a business did have to indicate that it could *do work* in that area of the state to be considered potentially available for contracts that took place there.

 MBE/WBEs that are not currently DBE-certified that reported annual revenues over the most recent three years so high as to deem them ineligible for DBE certification.

In addition, the study team's analyses for calculating the base figure for FHWA-funded contracts only included FHWA-funded prime contracts and subcontracts. The calculations for overall MBE/WBE availability included both FHWA- and state-funded transportation prime contracts and subcontracts.

Additional steps before WSDOT determines its overall DBE goal. WSDOT must consider whether to make a "step-2" adjustment to the base figure as part of determining its overall DBE goal. Step-2 adjustments can be upward or downward, but there is no requirement for WSDOT to make a step-2 adjustment as long as the agency can explain what factors it considered and why no adjustment was warranted. Chapter 9 discusses factors that WSDOT might consider in deciding whether to make a step-2 adjustment to the base figure.

H. Implications for Any DBE Contract Goals

If WSDOT chooses to use DBE contract goals in the future, it might use information from the availability analysis when setting any contract-specific DBE goals. It might also use information from a current DBE directory, a current bidders list, or other sources that could provide information about the availability of MBE/WBEs to participate in particular contracts.

The Federal DBE Program provides agencies that use DBE contract goals with some flexibility in how they set DBE contract goals. DBE goals on some contracts might be higher than the overall DBE goal. DBE goals on other contracts might be lower than the overall DBE goal. In addition, there may be some FHWA-funded contracts for which setting DBE contract goals would not be appropriate.

CHAPTER 6. Utilization Analysis

Chapter 6 presents information about minority- and women-owned business enterprise (MBE/WBE) participation on transportation prime contracts and subcontracts that the Washington State Department of Transportation (WSDOT) awarded during the study period. Chapter 3 and Appendix C provide additional information about utilization data collection and methodology.

Chapter 6 is organized in four parts:

- A. Overview of the utilization analysis;
- B. Overall utilization results; and
- C. Utilization results by year.

A. Overview of the Utilization Analysis

BBC analyzed Federal Highway Administration (FHWA)- and state-funded transportation contracts that WSDOT and local agencies awarded between October 1, 2008 and September 30, 2011 (i.e., federal fiscal years (FFYs) 2009, 2010, and 2011). The analysis included contracts that WSDOT administered through Local Programs. WSDOT's Highways and Local Programs division oversees funding to cities, counties, and regional agencies through Local Programs for the purpose of improving their respective transportation infrastructures and providing transportation services. Local agencies that receive the funding are responsible for awarding and administering the resulting contracts.

Definition of utilization. The study team measured MBE/WBE participation in terms of "utilization" — the percentage of prime contract and subcontract dollars that WSDOT and local agencies awarded to MBE/WBEs during the study period. Figure 6-1 presents more information about BBC's definition of utilization and how it was measured.

Figure 6-1. Defining and measuring "utilization"

"Utilization" of MBE/WBEs refers to the share of prime contract and subcontract dollars that an agency awarded to MBE/WBEs during a particular time period. BBC measures the utilization of all MBE/WBEs, regardless of certification, and separately of MBE/WBEs that are DBE-certified. BBC examines utilization separately by racial/ethnic and gender groups.

BBC measures MBE/WBE utilization as the percentage of total prime contract and subcontract dollars. For example, if 5 percent of prime contract and subcontract dollars went to WBEs on a particular set of contracts, WBE utilization for that set of contracts would be 5 percent.

Information about MBE/WBE utilization is instructive on its own, but it is even more instructive when it is compared with the utilization that might be expected based on the availability of MBE/WBEs for WSDOT work. BBC presents such comparisons as part of the disparity analysis in Chapter 7.

Differences between BBC's analysis and WSDOT Uniform Reports of DBE Awards/Commitments and Payments. The United States Department of Transportation (USDOT) requires WSDOT to submit reports about Disadvantaged Business Enterprise (DBE) utilization on its USDOT-funded transportation contracts twice each year (typically in June and December). BBC's analysis of MBE/WBE utilization goes beyond what WSDOT currently reports to USDOT. Two key differences are that:

- BBC counts all MBE/WBEs, not only certified DBEs; and
- BBC examines state-funded contracts, not only FHWA-funded contracts.

All MBE/WBEs, **not only certified DBEs**. Per USDOT regulations, WSDOT prepares DBE utilization reports for FHWA based on information about certified DBEs. WSDOT does not track the utilization of MBE/WBEs that are not DBE-certified. In contrast, BBC's utilization analyses include utilization of *all* MBE/WBEs (certified and non-certified) — not just the utilization of certified DBEs. The study team counted businesses as MBE/WBEs that may have once been DBE-certified and graduated (or let their certifications lapse) as well as MBE/WBEs that have never been certified. BBC provides utilization results for all MBE/WBEs and separately for MBE/WBEs that were DBE-certified during the study period.¹

State-funded contracts, not only FHWA-funded contracts. USDOT requires WSDOT to prepare DBE utilization reports only for its FHWA-funded transportation contracts. Thus, WSDOT reports certified DBE utilization only for those contracts. BBC analyzed MBE/WBE utilization on both FHWA- and state-funded WSDOT transportation contracts. Utilization information for state-funded contracts is instructive, because WSDOT does not apply any DBE contract goals to those contracts. USDOT suggests that an agency should examine MBE/WBE utilization on contracts to which DBE contract goals do not apply when designing its implementation of the Federal DBE Program.²

B. Overall Utilization Results

Figure 6-2 presents overall MBE/WBE utilization (as a percentage of total dollars) on transportation contracts that WSDOT and local agencies awarded during the study period, including both prime contracts and subcontracts. The darker portion of the bar presents WSDOT's utilization of MBE/WBEs that were DBE-certified during the study period.

As shown in Figure 6-2, overall, MBE/WBEs received 11.7 percent of WSDOT and local agency transportation prime contract and subcontract dollars during the study period. About 3.9 percent of those dollars went to MBE/WBEs that were DBE-certified.

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 $^{^1}$ Although businesses that are owned and operated by socially- and economically-disadvantaged white men can become certified as DBEs, BBC identified no DBE-certified white male-owned businesses that WSDOT utilized during the study period. In other words, all DBEs that WSDOT utilized during the study period were MBE/WBEs. Thus, utilization results for certified DBEs are a subset of the utilization results for all MBE/WBEs.

² https://www.civilrights.dot.gov/page/dbe-library

Figure 6-2.
Overall MBE/WBE utilization on WSDOT and local agency transportation prime contracts and subcontracts

Note

Includes FHWA- and state-funded WSDOT and local agency contracts.

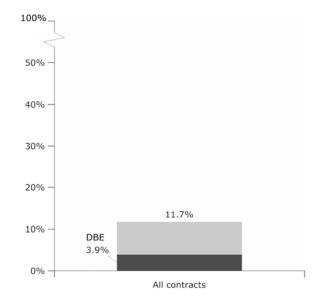
Darker portion of bar presents certified DBE utilization.

Number of prime contracts/subcontracts analyzed was 11,385.

For more detail and results by group, see Figure K-2 in Appendix K.

Source:

BBC Research & Consulting from WSDOT contracting



In addition, BBC separately examined utilization of each MBE/WBE group that is identified in 49 Code of Federal Regulations Part 26. As shown in Figure 6-3, overall, WSDOT and local agencies' utilization of WBEs (6.5%) was higher than any other MBE/WBE group. Among MBE groups, utilization of Native American-owned (1.7%) and African American-owned businesses (1.4%) was higher than other groups.

A small number of businesses accounted for a large percentage of MBE/WBE utilization on WSDOT and local agency transportation contracts during the study period:

- A non-Hispanic white woman-owned highway and street construction firm that was not DBE-certified received 30 percent of the total dollars that went to WBEs (approximately \$123 million of \$407 million);
- An African American-owned electrical contracting firm that was not DBE-certified received 84 percent of the total dollars that went to African American-owned businesses (approximately \$73 million of \$87 million);
- A non-Hispanic white woman-owned electrical contracting firm that was not DBE-certified received 14 percent of the total dollars that went to WBEs (approximately \$57 million of \$407 million);
- A Native American-owned highway and street construction firm that was DBE-certified received 32 percent of the total dollars that went to Native American-owned businesses (approximately \$34 million of \$105 million);
- Another Native American-owned highway and street construction firm that was not DBEcertified received 19 percent of the total dollars that went to Native American-owned businesses (approximately \$20 million of \$105 million); and
- An Asian-Pacific American-owned painting and striping firm that was not DBE-certified received 21 percent of the total dollars that went to Asian-Pacific American-owned businesses (approximately \$14 million of \$66 million).

Figure 6-3.
Overall MBE/WBE utilization on WSDOT and local agency transportation prime contracts and subcontracts by MBE/WBE group

Includes FHWA- and state-funded WSDOT and local agency contracts.

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

Number of prime contracts/subcontracts analyzed was 11,385.

For more detail and results by group, see Figure K-2 in Appendix K.

Source:

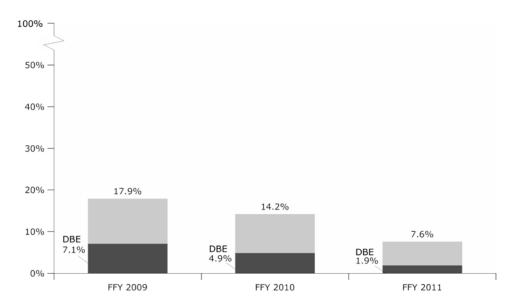
BBC Research & Consulting from WSDOT contracting data.

	Total		
	\$ in thousands	Percent	
MBE/WBEs			
African American-owned	\$86,848	1.4 %	
Asian-Pacific American-owned	65,952	1.0	
Subcontinent Asian American-owned	9,893	0.2	
Hispanic American-owned	61,495	1.0	
Native American-owned	105,419	1.7	
WBE (white women-owned)	406,726	6.5	
Total MBE/WBE	\$736,333	11.7 %	
Majority-owned	5,550,889	88.3	
Total	\$6,287,222	100.0 %	
DBEs			
African American-owned	\$12,601	0.2 %	
Asian-Pacific American-owned	25,911	0.4	
Subcontinent Asian American-owned	4,724	0.1	
Hispanic American-owned	42,582	0.7	
Native American-owned	56,216	0.9	
WBE (white women-owned)	100,570	1.6	
Total DBE	\$242,604	3.9 %	
Non-DBE	6,044,618	96.1	
Total	\$6,287,222	100.0 %	

C. Utilization Results by Year

BBC also examined MBE/WBE utilization for each study period year. As shown in Figure 6-4, MBE/WBE utilization on WSDOT transportation contracts declined dramatically between FFY 2009 (17.9%) and FFY 2011 (7.6%). Certified DBE utilization also fell sharply, declining from 7.1 percent in FFY 2009 to only 1.9 percent in FFY 2011. The study team observed a similar decline in certified DBE utilization in FFY 2011 based on WSDOT Uniform Reports of DBE Awards/Commitments and Payments, as reported to FHWA (for details, see Chapter 9).





Note: Includes FHWA- and state-funded WSDOT and local agency contracts.

Darker portion of bar presents certified DBE utilization.

Number of prime contracts/subcontracts analyzed was 4,244 for FFY 2009, 3,883 for FFY 2010, and 3,258 for FFY 2011.

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

Source: BBC Research & Consulting from WSDOT contracting data.

Figure 6-5 presents year-by-year utilization for each MBE/WBE group. Each MBE/WBE group received a smaller percentage of WSDOT contract dollars in FFY 2011 than in FFY 2009. Although utilization of WBEs declined along with MBEs over those three years, the decline was less severe for WBEs. Key results from FFYs 2009, 2010, and 2011 include the following:

- WBEs were utilized more than any other group in FFY 2009 (7.9%), 2010 (7.7%), and 2011 (5.2%).
- Subcontinent Asian American-owned businesses were utilized less than any other group in FFY 2009 (0.2%), 2010 (0.2%), and 2011 (0.1%).
- African American-owned businesses showed higher utilization in FFY 2009 (4.1%) than any other MBE group. By FFY 2011, African American owned-businesses (0.4%) were utilized less than any other group besides Subcontinent Asian American-owned businesses. The vast majority of dollars that went to African American-owned businesses in FFY 2009 (approximately \$53 million of \$57 million, or 92%) went to a single African American-owned electrical contracting firm that was not DBE-certified.

Figure 6-5.

MBE/WBE utilization on WSDOT and local agency transportation prime contracts and subcontracts, by MBE/WBE group and study period year

	FFY 200	FFY 2009 FFY 2010		FFY 201	1	
	\$ in thousands	Percent	\$ in thousands	Percent	\$ in thousands	Percent
MBE/WBEs						
African American-owned	\$57,280	4.1 %	\$18,490	1.1 %	\$11,086	0.4 %
Asian-Pacific American-owned	20,136	1.4	21,313	1.2	24,505	0.8
Subcontinent Asian American-owned	3,128	0.2	3,829	0.2	2,936	0.1
Hispanic American-owned	20,750	1.5	20,688	1.2	20,058	0.6
Native American-owned	38,077	2.7	49,320	2.8	18,012	0.6
WBE (white women-owned)	110,295	7.9	133,946	7.7	162,485	5.2
Total MBE/WBE	\$249,666	17.9 %	\$247,586	14.2 %	\$239,081	7.6 %
Majority-owned	1,141,764	82.1	1,494,959	85.8	2,914,166	92.4
Total	\$1,391,430	100.0 %	\$1,742,545	100.0 %	\$3,153,247	100.0 %
DBEs						
African American-owned	\$4,321	0.3 %	\$6,566	0.4 %	\$1,715	0.1 %
Asian-Pacific American-owned	13,943	1.0	5,155	0.3	6,813	0.2
Subcontinent Asian American-owned	3,118	0.2	628	0.0	978	0.0
Hispanic American-owned	12,756	0.9	16,101	0.9	13,725	0.4
Native American-owned	19,991	1.4	26,660	1.5	9,566	0.3
WBE (white women-owned)	44,865	3.2	30,078	1.7	25,627	0.8
Total DBE	\$98,994	7.1 %	\$85,187	4.9 %	\$58,423	1.9 %
Non-DBE	1,292,436	92.9	1,657,358	95.1	3,094,824	98.1
Total	\$1,391,430	100.0 %	\$1,742,545	100.0 %	\$3,153,247	100.0 %

Note: Includes FHWA- and state-funded WSDOT and local agency contracts.

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

Number of prime contracts/subcontracts analyzed was 4,244 for FFY 2009, 3,883 for FFY 2010, and 3,258 for FFY 2011.

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

Source: BBC Research & Consulting from WSDOT

CHAPTER 7. Disparity Analysis

The disparity analysis compared the utilization of minority- and women-owned businesses (MBE/WBEs) on transportation contracts that the Washington State Department of Transportation (WSDOT) and local agencies awarded during the study period to what those businesses might be expected to receive based on their availability for that work. Chapter 7 presents the disparity analysis in six parts:

- A. Overview of disparity analysis;
- B. Overall disparity analysis results;
- C. Disparity analysis results by year;
- D. Disparity analysis results by funding source;
- E. Disparity analysis results for FHWA-funded construction contracts without goals;
- F. Disparity analysis results for PTD contracts; and
- G. Statistical significance of disparity analysis results.

A. Overview of Disparity Analysis

As part of the disparity analysis, BBC compared the actual utilization of MBE/WBEs on WSDOT transportation prime contracts and subcontracts with the percentage of contract dollars that MBE/WBEs might be expected to receive based on their availability for that work. (Availability is also referred to as the "utilization benchmark.") BBC made those comparisons for each individual MBE/WBE group. BBC reports disparity analysis results for all WSDOT transportation contracts considered together and separately for different sets of contracts (e.g., Federal Highway Administration (FHWA)- and state-funded contracts).

BBC expressed both actual utilization and availability as percentages of the total dollars associated with a particular set of contracts, making them directly comparable (e.g., 5% utilization compared with 4% availability). BBC then calculated a "disparity index" to help compare utilization and availability results among MBE/WBE groups and across different sets of

contracts. Figure 7-1 describes how BBC calculated disparity indices.

Figure 7-1. Calculation of disparity indices

The disparity index provides a way of assessing how closely the actual utilization of an MBE/WBE group matches the percentage of contract dollars that the group might be expected to receive based on its availability for a specific set of contracts. One can directly compare a disparity index for one group to that of another group and compare disparity indices across different sets of contracts. BBC calculates disparity indices using the following formula:

For example, if actual utilization of WBEs on a set of contracts was 2 percent and the availability of WBEs for those contracts was 10 percent, then the disparity index would be 2 percent divided by 10 percent, which would then be multiplied by 100 to equal 20. In this example, WBEs would have actually received 20 cents of every dollar that they might be expected to receive based on their availability.

A disparity index of 100 indicates an exact match between actual utilization and availability for a particular MBE/WBE group for a specific set of contracts (often referred to as "parity"). A disparity index of less than 100 may indicate a disparity between utilization and availability, and disparities of less than 80 are described in this report as "substantial." ¹

The disparity analysis results that BBC presents in Chapter 7 summarize detailed disparity analysis tables provided in Appendix K. Each table in Appendix K presents disparity analysis results for a different set of WSDOT contracts. For example, Figure K-2 in Appendix K reports disparity analysis results for *all* WSDOT transportation contracts that the study team examined as part of the study — that is, FHWA- and state-funded transportation-related construction and engineering prime contracts and subcontracts that WSDOT and local agencies awarded during the study period. Appendix K includes analogous tables for different subsets of contracts, including those that present results separately for FHWA- and state-funded contracts; prime contracts and subcontracts; construction and engineering contracts; contracts originating from different regions of the state; and large and small contracts. The heading of each table in Appendix K provides a description of the subset of contracts that the study team analyzed for that particular disparity analysis table.

A review of Figure 7-2 helps to introduce the calculations and format of all of the disparity analysis tables in Appendix K. (Figure 7-2 is identical to Figure K-2 in Appendix K.) As illustrated in Figure 7-2, the disparity analysis tables present information about each MBE/WBE group (as well as about all businesses) in separate rows:

- "All firms" in row (1) pertains to information about all non-Hispanic white male-owned businesses (i.e., majority-owned businesses) and MBE/WBEs considered together.
- Row (2) provides results for all MBE/WBEs, regardless of whether they were certified as MBE/WBEs or as Disadvantaged Business Enterprises (DBEs) through the Washington State Office of Minority and Women's Business Enterprises (OMWBE).
- Row (3) provides results for all WBEs, regardless of whether they were certified as WBE/DBEs through OMWBE.
- Row (4) provides results for all MBEs, regardless of whether they were certified as MBE/DBEs through OMWBE.
- Rows (5) through (10) provide results for businesses of each individual minority group, regardless of whether they were certified as MBE/DBEs through OMWBE.

The bottom half of Figure 7-2 presents analogous results for businesses that were certified as DBEs as of January 2012. BBC included a row for white male-owned DBEs, although the analysis did not identify any white male-owned DBEs that WSDOT utilized on transportation prime contracts or subcontracts during the study period.

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¹ Some courts deem a disparity index below 80 as being "substantial" and have accepted it as evidence of adverse impacts against MBE/WBEs. For example, see *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 B for additional discussion of those and other cases.

Figure 7-2. Example of a disparity analysis table from Appendix K (same as Figure K-2 in Appendix K)

Firm Ty	rpe	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (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
	Il firms	11,385	\$6,287,222	\$6,287,222			**	(4) 5) 200
(2)	MBE/WBE	2,739	\$736,333	\$736,333	11.7	8.7	3.0	134.8
(3)	WBE	1,540	\$406,726	\$406,726	6.5	2.9	3.6	200+
(4)	MBE	1,199	\$329,607	\$329,607	5.2	5.8	-0.6	89.9
(5)	African American-owned	168	\$86,607	\$86,848	1.4	0.9	0.4	145.7
(6)	Asian-Pacific American-owned	307	\$65,769	\$65,952	1.0	0.6	0.4	170.2
(7)	Subcontinent Asian American-owned	33	\$9,866	\$9,893	0.2	0.6	-0.4	27.5
(8)	Hispanic American-owned	255	\$61,325	\$61,495	1.0	1.9	-0.9	52.6
(9)	Native American-owned	393	\$105,127	\$105,419	1.7	1.8	-0.2	91.3
(10)	Unknown MBE	43	\$912					
(11)	DBE-certified	1,309	\$242,604	\$242,604	3.9			
(12)	Woman-owned DBE	608	\$100,570	\$100,570	1.6			
(13)	Minority-owned DBE	701	\$142,034	\$142,034	2.3			
(14)	African American-owned DBE	128	\$12,601	\$12,601	0.2			
(15)	Asian-Pacific American-owned DBE	141	\$25,911	\$25,911	0.4			
(16)	Subcontinent Asian American-owned DBE	21	\$4,724	\$4,724	0.1			
(17)	Hispanic American-owned DBE	130	\$42,582	\$42,582	0.7			
(18)	Native American-owned DBE	281	\$56,216	\$56,216	0.9			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Utilization. Each disparity table includes the same columns and rows:

- Column (a) presents the number of prime contracts and subcontracts (i.e., contract elements) that the study team analyzed for that particular set of contracts. As shown in row (1) of column (a) of Figure 7-2, the study team analyzed 11,385 contract elements. The value presented in column (a) for each individual MBE/WBE group represents the number of contract elements on which businesses of that particular group were utilized (e.g., as shown in row (5) of column (a), African American-owned businesses were utilized on 168 prime contracts and subcontracts).
- Column (b) presents the dollars (in thousands) that were associated with the set of contract elements. As shown in row (1) of column (b) of Figure 7-2, the study team examined about \$6.3 billion for the set of contract elements. The dollar totals include both prime contract and subcontract dollars.
- Column (c) presents the contract dollars (in thousands) for which each MBE/WBE group was utilized on the set of contracts after adjusting total dollars for businesses that the study team identified as MBEs, but for which specific race/ethnicity information was not available. BBC distributed the dollars that went to "unknown MBEs" to each MBE group on a pro-rated dollars basis. For example, because African American-owned businesses received 26 percent of the total contract dollars that all MBEs received, the study team distributed 26 percent of the dollars that went to unknown MBEs to African American-owned businesses. As shown in row (10) of column (b) of Figure 7-2, across all transportation contracts that WSDOT awarded during the study period, there was approximately \$912,000 that went to unknown MBEs.
- Column (d) presents the utilization of each MBE/WBE group as a percentage of total dollars associated with the set of contract elements. The study team calculated each percentage in column (d) by dividing the dollars going to a particular group in column (c) by the total dollars associated with the set of contract elements shown in row (1) of column (c), and then expressing the result as a percentage (e.g., for African American-owned businesses, the study team divided \$86.8 million by \$6.3 billion and multiplied by 100 for a result of 1.4%, as shown in row (5) of column (d)).

Availability (utilization benchmark). Column (e) of Figure 7-2 presents the availability of each MBE/WBE group for all transportation prime contracts and subcontracts that WSDOT and local agencies awarded during the study period. Availability estimates, which are represented as a percentage of the total contracting dollars associated with the set of contracts, serve as a benchmark against which to compare utilization for a specific group for a particular set of contracts (e.g., as shown in row (5) of column (e), availability of African American-owned businesses is 0.9%, compared with 1.4% utilization for those businesses). BBC did not calculate availability figures separately for businesses that were DBE-certified.

Differences between utilization and availability. The next step in analyzing whether there was a disparity between the utilization and availability of a particular MBE/WBE group is to subtract the utilization result from the availability result. Column (f) of Figure 7-2 presents the percentage point difference between utilization and availability for each MBE/WBE group. For example, as presented in row (2) of column (f) of Figure 7-2, MBE/WBE utilization was 3.0 percentage points higher than MBE/WBE availability.

Disparity indices. It is sometimes difficult to interpret absolute percentage differences between utilization and availability, especially when the percentages are relatively small. Therefore, BBC also calculated a disparity index for each MBE/WBE group, which measured utilization relative to availability and served as a metric to compare any disparities across different MBE/WBE groups and across different sets of contracts. BBC calculated disparity indices by dividing percent utilization for each group by percent availability and multiplying the result by 100. Thus, smaller values for the disparity indices indicated greater disparities (i.e., a greater degree of underutilization).

Column (g) of Figure 7-2 presents the disparity index for each MBE/WBE group. For example, as reported in row (2) of column (g), the disparity index for all MBE/WBEs considered together was about 135, indicating that MBE/WBEs actually received approximately \$1.35 for every dollar that they might be expected to receive based on their availability for the transportation prime contracts and subcontracts that WSDOT and local agencies awarded during the study period. BBC did not calculate disparity indices separately for DBE-certified businesses.

Results when disparity indices were very large or when availability was zero. BBC applied the following rules when disparity indices were exceedingly large or could not be calculated because the study team did not identify any businesses of a particular group as available for a particular set of contract elements:

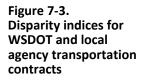
- When BBC's calculations showed a disparity index exceeding 200, BBC reported an index of "200+." A disparity index of 200+ means that utilization was more than twice as much as availability for a particular group for a particular set of contracts.
- When there was no utilization and 0 percent availability for a particular group for a particular set of contracts, BBC reported a disparity index of "100," indicating parity.
- When utilization for a particular group for a particular set of contracts was greater than 0 percent but availability was 0 percent, BBC reported a disparity index of "200+."²

B. Overall Disparity Analysis Results

BBC used the disparity analysis results from Figure 7-2 (corresponding to Figure K-2 in Appendix K) to assess any disparities between MBE/WBE utilization and availability on all transportation prime contracts and subcontracts that WSDOT and local agencies awarded during the study period. Figure 7-3 presents disparity indices for all MBE/WBE groups considered together and separately for each group. The line down the center of the graph shows a disparity index level of 100, which indicates parity between utilization and availability. Disparity indices less than 100 indicate disparities between utilization and availability (i.e., underutilization). For reference, a line is also drawn at an index level of 80, because some courts use 80 as a threshold for what indicates a substantial disparity.

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² A particular MBE/WBE group could show a utilization percentage greater than 0 percent but an availability percentage of 0 percent for many reasons, including the fact that one or more utilized businesses were out of business at the time that BBC conducted availability interviews.

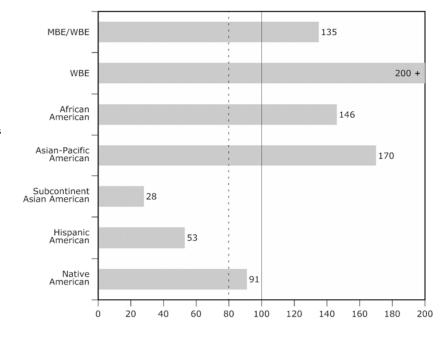


Number of prime contracts/subcontracts analyzed was 11,385.

For more detail, see Figure K-2 in Appendix K.

Source:

BBC Research & Consulting availability and utilization analyses.



As shown in Figure 7-3, overall, utilization of MBE/WBEs on WSDOT transportation contracts during the study period was higher than what might be expected based on their availability for those contracts. The disparity index of 135 indicates that all MBE/WBEs considered together received about 135 percent of the contract dollars that they might be expected to receive based on their availability for those contracts. Note that DBE contract goals applied to many FHWA-funded construction contracts during the study period, which may have affected the overall level of MBE/WBE utilization and the resulting disparity indices.

- Three MBE/WBE groups exhibited disparity indices below parity Subcontinent Asian American-owned businesses (disparity index of 28), Hispanic American-owned businesses (disparity index of 53), and Native American-owned businesses (disparity index of 91).
- WBEs (disparity index of 200+), Asian-Pacific American-owned businesses (disparity index of 170), and African American-owned businesses (disparity index of 146) did not exhibit disparities. The vast majority of the dollars that went to African American-owned businesses (approximately \$73 million of \$87 million, or 84%) went to a single African American-owned business that was not DBE-certified.

C. Disparity Analysis Results by Year

Figure 7-4 presents disparity analysis results by study period year, both overall for all MBE/WBEs considered together and separately by group. As shown in Figure 7-4, overall, MBE/WBEs did not show disparities in federal fiscal years (FFYs) 2009 (disparity index of 136), 2010 (disparity index of 124), or 2011 (disparity index of 146). However, the results by group indicate that some groups showed substantial disparities, particularly, in FFY 2011:

Both Subcontinent Asian American- and Hispanic American-owned businesses showed substantial disparities in each year of the study period. In FFY 2011, Subcontinent American-owned businesses exhibited a disparity index of 32 and Hispanic Americanowned business exhibited a disparity index of 59.

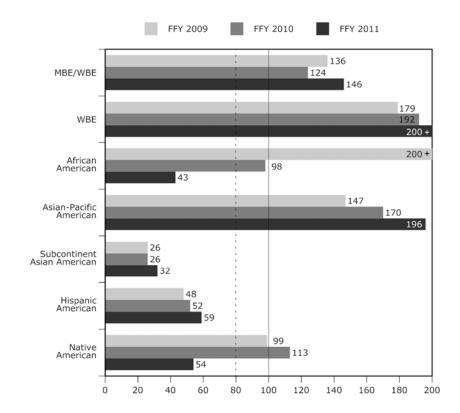
Figure 7-4.
Disparity indices for WSDOT and local agency transportation contracts by study period year

Number of prime contracts/subcontracts analyzed was 4,244 for FFY 2009, 3,883 for FFY 2010, and 3,258 for FFY 2011.

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

Source:

BBC Research & Consulting availability and utilization analyses.



- African American-owned businesses did not show substantial disparities in FFYs 2009 or 2010, but showed a substantial disparity in FFY 2011 (disparity index of 43). Most of the dollars that went to African American-owned businesses in FFYs 2009 (approximately \$53 million of \$57 million) and 2010 (approximately \$15 million of \$18 million) went to a single African American-owned electrical contracting firm that was not DBE-certified.
- Similar to African American-owned businesses, Native American-owned businesses did not show substantial disparities in either FFY 2009 or FFY 2010 but did show a substantial disparity in FFY 2011 (disparity index of 54).
- Neither WBEs nor Asian-Pacific American-owned businesses showed disparities in FFYs 2009, 2010, or 2011. In FFY 2011, WBEs exhibited a disparity index of 200+ and Asian-Pacific American-owned businesses exhibited a disparity index of 196.

D. Disparity Analysis Results by Funding Source

In FFYs 2009, 2010, and 2011, WSDOT applied contract-specific DBE goals to many FHWA-funded contracts. During that time period, WSDOT applied voluntary MBE/WBE goals to many state-funded contracts, but did not require contractors to meet those goals or show good faith efforts to do so.³ Comparing results between FHWA- and state-funded contracts is one way to assess the impact of DBE contract goals on the participation of MBE/WBEs in WSDOT transportation contracts. Figure 7-5 presents disparity analysis results separately for FHWA- and state-funded transportation contracts.

³ WSDOT used to apply mandatory race- and gender-conscious contract goals to state-funded contracts. However, Initiative 200, passed in 1998, prohibited state agencies from applying race- and gender-conscious measures to those contracts.

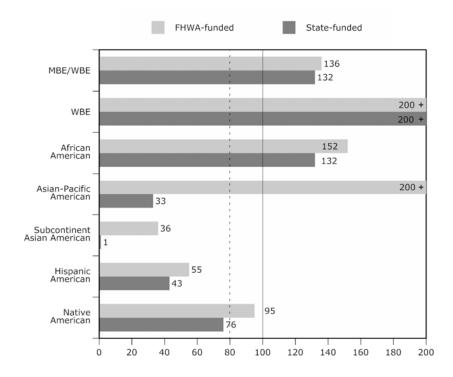
Figure 7-5.
Disparity indices for
WSDOT transportation
contracts by funding
source

Number of prime contracts/subcontracts analyzed was 9,321 for FHWA-funded and 2,064 for state-funded.

See Figures K-8 and K-14 for corresponding disparity results tables.

Source:

BBC Research & Consulting availability and utilization analyses.



Overall, disparities for MBE/WBEs were similar on state-funded (disparity index of 132) and FHWA-funded contracts (disparity index of 136). However, there were several key differences by group:

- Whereas Asian-Pacific American-owned businesses did not show a disparity on FHWA-funded contracts (disparity index of 200+), they showed a substantial disparity on state-funded contracts (disparity index of 33), to which DBE goals did not apply.
- Similar to Asian-Pacific American-owned businesses, Native American-owned businesses
 did not exhibit a substantial disparity on FHWA-funded contracts (disparity index of 95)
 but did exhibit a substantial disparity on state-funded contracts (disparity index of 76).
- Both Subcontinent Asian American-owned businesses and Hispanic American-owned businesses showed substantial disparities on both FHWA- and state-funded contracts. Subcontinent Asian American-owned businesses exhibited a disparity index of 1 on state-funded contracts and Hispanic American-owned businesses exhibited a disparity index of 43.
- Neither WBEs nor African American-owned businesses showed disparities on either FHWA-funded or state-funded contracts. However, the vast majority of the dollars that went to African American-owned businesses on state-funded contracts (\$22.5 million of \$23 million) went to a single African American-owned electrical contracting firm that was not DBE-certified.

BBC also examined disparities on state-funded contracts — to which voluntary MBE/WBE goals applied — by study period year. Figure 7-6 presents those results. Overall, MBE/WBEs did not show disparities in FFYs 2009 (disparity index of 170) or 2011 (disparity index of 110) on state-funded contracts. However, MBE/WBEs did show substantial disparities in FFY 2010 (disparity index of 75).

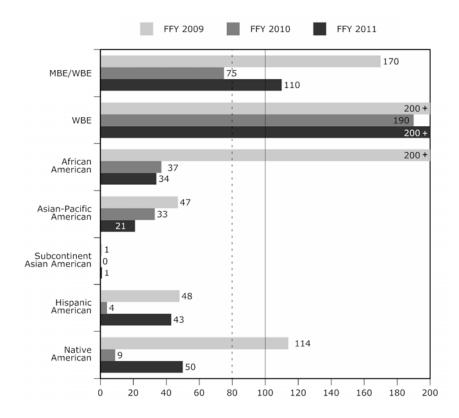
Figure 7-6.
Disparity indices for WSDOT state-funded transportation contracts by study period year

Number of prime contracts/subcontracts analyzed was 759 for FFY 2009, 798 for FFY 2010, and 507 for FFY 2011.

See Figures K-17, K-18, and K-19 for corresponding disparity results tables.

Source:

BBC Research & Consulting availability and utilization analyses.



An examination of those results by group indicated that whereas WBEs did not show substantial disparities in any year of the study period, all MBE groups showed substantial disparities after FFY 2009:

- After FFY 2009, all MBE groups exhibited disparity indices of 50 or lower on state-funded transportation contracts.
- African American-owned businesses (disparity index of 200+) and Native American-owned businesses (disparity index of 114) were the only two MBE groups that did not show substantial disparities on state-funded contracts in FFY 2009. However, virtually all of the dollars that went to African American-owned businesses on state-funded contracts in FFY 2009 (\$19.3 million of \$19.6 million) went to a single African American-owned electrical contracting firm that was not DBE-certified.

For details about MBE/WBE utilization and availability on state-funded contracts, see Figure K-14 in Appendix K. For details about MBE/WBE utilization and availability on state-funded contracts by study period year, see Figures K-17, F-18, and K-19.

E. Disparity Analysis Results for FHWA-funded Construction Contracts Without Goals

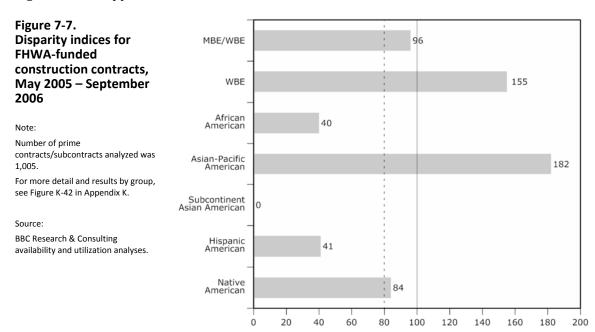
BBC also analyzed FHWA-funded construction contracts that WSDOT and local agencies awarded between May 9, 2005 and September 30, 2006. WSDOT did not set DBE contract goals on its FHWA-funded contracts during that time period in response to the May 2005 *Western States Paving Company vs. Washington State DOT* court decision. It is instructive to examine any disparities between MBE/WBE utilization and availability on those contracts as another way to

assess whether the lack of race- and gender-conscious programs affected the participation of MBE/WBEs on WSDOT transportation contracts.

Figure 7-7 presents overall disparity analysis results for FHWA-funded construction contracts that WSDOT and local agencies awarded between May 9, 2005 and September 30, 2006. Overall, MBE/WBEs did not exhibit a substantial disparity on those contracts (disparity index of 96). However, results varied for individual MBE/WBE groups:

- Three MBE/WBE groups exhibited substantial disparities African American-owned businesses (disparity index of 40), Subcontinent Asian American-owned businesses (disparity index of 0), and Hispanic American-owned businesses (disparity index of 41).
- Native American-owned businesses exhibited a disparity index of 84, somewhat higher than the threshold of 80 that some courts use as an indicator of a substantial disparity.
- Neither WBEs (disparity index of 155) nor Asian-Pacific American-owned businesses (disparity index of 182) exhibited disparities.

For details about MBE/WBE utilization and availability on FHWA-funded construction contracts that WSDOT and local agencies awarded between May 9, 2005 and September 30, 2006, see Figure K-42 in Appendix K.



F. Disparity Analysis Results for PTD Contracts

WSDOT administers some Federal Transit Administration (FTA)-funded construction and engineering contracts through its Public Transportation Division (PTD). PTD awards FTA-funded grants to local agencies, which use most of those dollars for expenditures that are unrelated to transportation construction or engineering contracts. However, local agencies use some of that grant money to fund construction and engineering projects, such as installing bus shelters and building or redesigning transit stations. Some funds go toward developing regional

transportation plans, which BBC included in its analysis of engineering-related contracts. Local agencies typically do not set DBE contract goals on PTD contracts.

Note that the total number of PTD transportation construction and engineering contracts that were awarded during the study period was relatively small. Including subcontracts, there were only 32 contract elements included in BBC's analysis of PTD contracts.

Figure 7-8 presents overall disparity analysis results for PTD contracts. As shown in Figure 7-8, overall, MBE/WBEs received about one-third of the dollars that they would be expected to receive based on their availability for PTD contracts (disparity index of 34). Every MBE/WBE group showed substantial disparities on those contracts, and four groups — African American-, Asian-Pacific American-, Subcontinent Asian American-, and Native American-owned businesses — exhibited disparity indices of 0.

For details about MBE/WBE utilization and availability on PTD contracts, see Figure K-44 in Appendix K.



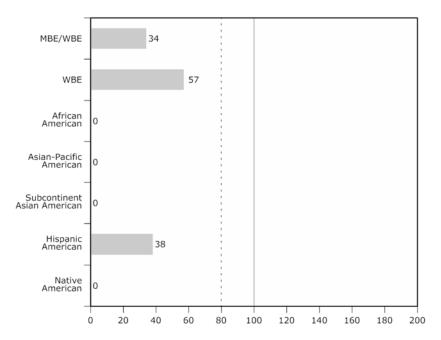
Note

Number of prime contracts/subcontracts analyzed was

For more detail and results by group, see Figure K-44 in Appendix K.

Source:

BBC Research & Consulting availability and utilization analyses.



G. Statistical Significance of Disparity Analysis Results

Statistical significance tests allow researchers to test the degree to which they can reject "random chance" as an explanation for any observed quantitative differences. Random chance in data sampling is the factor that researchers consider most in determining the statistical significance of results. However, BBC attempted to contact every firm in the relevant geographic market area that Dun & Bradstreet (D&B) identified as doing business within relevant subindustries (as described in Chapter 5), mitigating many of the concerns associated with random chance in data sampling as they may relate to BBC's availability analysis. Much of the utilization analysis also approaches a "population" of contracts. Therefore, one might consider any disparity identified when comparing overall utilization with availability to be "statistically significant." Figure 7-9 explains the relatively high level of statistical

Figure 7-9.
Statistical confidence in availability and utilization results

As part of the availability analysis, BBC conducted telephone interviews with more than 3,000 business establishments — a number of completed interviews that is generally considered large enough to be treated as a "population," not a sample. The confidence interval around BBC's estimate of MBE/WBE representation among all businesses available for WSDOT transportation work — 19.7 percent — is accurate within about +/- 1.1 percentage points at the 95 percent confidence level (BBC applied the finite population correction factor when determining confidence intervals). By comparison, many survey results for proportions reported in the popular press are accurate within about +/- 5 percentage points.

confidence inherent in the utilization and availability results.

Monte Carlo analysis. BBC used a sophisticated simulation tool to further examine statistical significance of disparity analysis results. There were many opportunities in the sets of prime contracts and subcontracts that BBC analyzed as part of the disparity study for MBE/WBEs to be awarded work. Some contract elements involved large dollar amounts and others involved only a few thousand dollars.

The analyses that the study team completed as part of the disparity study were well-suited for using Monte Carlo analysis to test the statistical significance of disparity analysis results. Monte Carol analysis was appropriate for that purpose, because, among the contracts WSDOT and local agencies awarded during the study period, there were many individual chances for businesses to win prime contracts and subcontracts, each with a different payoff (i.e., each with a different dollar value). Figure 7-10 describes BBC's use of Monte Carlo analysis.

It is important to note that Monte Carlo simulations may not be necessary to establish the statistical significance of results (see discussion in Figure 7-9), and it may not be appropriate for very small populations of businesses (e.g., Subcontinent Asian American-owned businesses in the Washington transportation contracting industry).⁴

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⁴ Even if there was 0 percent utilization of a particular MBE/WBE group, the study team may not be able to reject random chance as an explanation for a particular disparity analysis result based on Monte Carlo simulation results. There may have been a small number of businesses in a particular MBE/WBE group or a small number of contract elements included in the analysis that could have caused the result to not be statistically significant. Simulation results could have also been affected by the size distribution of contract elements.

Figure 7-10. Monte Carlo Analysis

The study team began the Monte Carlo analysis by examining individual contract elements. For each contract element, BBC's availability database provided information on individual businesses that were available for that contract element based on type of work, contractor role, contract size, and location of the work.

The study team assumed that each available business had an equal chance of winning that contract element. For example, the odds of a WBE receiving that contract element were equal to the number of WBEs available for the contract element divided by the total number of businesses available for the work. The Monte Carlo simulation then randomly chose a business from the pool of available businesses to win the contract element.

The Monte Carlo simulation repeated the above process for all other elements in a particular set of contracts. The output of a single Monte Carlo simulation for all contract elements in the set represented simulated utilization of MBE/WBEs, by group, for that set of contract elements.

The entire Monte Carlo simulation was then repeated one million times for each set of contracts. The combined output from all 1 million simulations represented a probability distribution of the overall utilization of MBE/WBEs if contracts were awarded randomly based on the availability of businesses working in the Washington transportation contracting industry.

The output of the Monte Carlo simulations represents the number of runs out of 1 million that produced a simulated utilization result that was equal or below the observed utilization in the actual data for each MBE/WBE group and for each set of contracts. If that number was less than or equal to 25,000 (i.e., 2.5% of the total number of runs), then the study team considered that disparity index to be statistically significant at the 95 percent confidence level. If that number was less than or equal to 50,000 (i.e., 5.0% of the total number of runs), then the study team considered that disparity index to be statistically significant at the 90 percent confidence level.

Results. BBC identified substantial disparities for MBEs overall on:

- State-funded contracts during the study period;
- FHWA- and state-funded contracts in FFY 2011; and
- State-funded contracts in FFY 2011.5

BBC applied Monte Carlo analysis to those disparity analysis results. Figure 7-11 presents the results from the Monte Carlo simulations as they relate to the statistical significance of disparities that the study team observed for MBE/WBEs.

As shown in Figure 7-11, Monte Carlo simulations indicated that the disparities that MBEs exhibited on state-funded contracts, on FHWA- and state-funded contracts in FFY 2011, and on state-funded contracts in FFY 2011 were all statistically significant. The disparity indices for state-funded contracts and FHWA- and state-funded contracts in FFY 2011 were statistically significant at the 90 percent confidence level. The disparity index for state-funded contracts in FFY 2011 was statistically significant at the 95 percent confidence level.

⁵ The study team did not observe disparities for WBEs on any of those contract sets.

Figure 7-11.

Monte Carlo simulation results for disparity analysis results

MBE/WBE Group	Disparity index	Number of simulation runs out of one million that replicated observed utilization	Probability of observed disparity occurring due to "chance"	Reject chance in awards of contracts as a cause of disparity?
State-funded contracts, FFYs 2009, 2010 and 2011				
MBE	65	48,785	4.9 %	Yes *
WBE	200 +	N/A	N/A	N/A
FHWA- and state-funded contracts, FFY 2011				
MBE	66	39,582	4.0 %	Yes *
WBE	200 +	N/A	N/A	N/A
State-funded contracts, FFY 2011				
MBE	37	10,001	1.0 %	Yes **
WBE	200 +	N/A	N/A	N/A

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

 $Source: \quad BBC \ Research \ \& \ Consulting \ availability \ and \ utilization \ analyses.$

^{* 90} percent confidence level. ** 95 percent confidence level.

CHAPTER 8. Further Exploration of Disparities

Six areas of questions provide a framework for further exploration of the disparities that the study team observed between the utilization and availability of minority- and women-owned business enterprises (MBE/WBEs) on Washington State Department of Transportation (WSDOT) and local agency prime contracts and subcontracts:

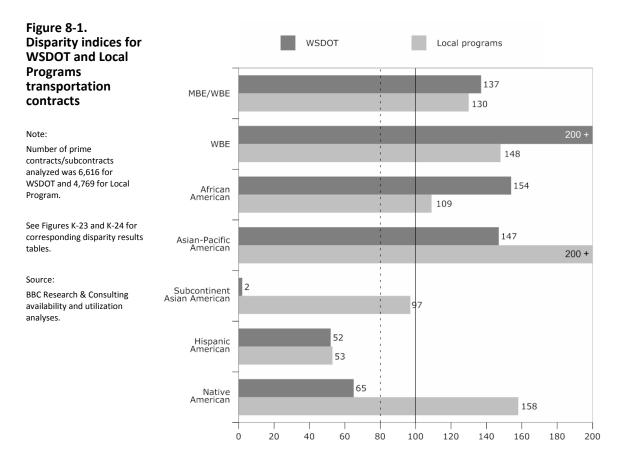
- A. Are there disparities for WSDOT and Local Programs contracts?
- B. Are there disparities in different areas of the state?
- C. Are there disparities for construction and engineering contracts?
- D. Are there disparities for prime contracts and subcontracts?
- E. Does contract size explain any disparities for prime contracts?
- F. Do bid/proposal processes explain any disparities for prime contracts?

Answers to those questions may be relevant as WSDOT considers how much of its overall Disadvantaged Business Enterprise (DBE) goal can be met through race- and gender-neutral means and what measures may be needed to implement the Federal DBE Program. In accordance with federal regulations, answers to those questions may also help WSDOT identify the specific racial/ethnic and gender groups — if any — that might be included in any future race- or gender-conscious programs.

A. Are there disparities for WSDOT and Local Programs contracts?

In addition to awarding contracts directly, WSDOT administers Local Programs using Federal Highway Administration (FHWA) funds. WSDOT's Highways and Local Programs division oversees funding to numerous cities, counties, and regional agencies through Local Programs for the purpose of improving their respective transportation infrastructures and providing transportation services. Local agencies that receive the funding are responsible for awarding and administering the resulting contracts. Note that contract-specific DBE goals applied to many WSDOT contracts and to most Local Program contracts — all of which were FHWA-funded — during the study period.

Figure 8-1 presents disparity analysis results for Local Programs contracts compared to contracts that WSDOT awarded directly. Results for WSDOT and Local Programs contracts were quite similar. Overall, MBE/WBEs did not show disparities on WSDOT contracts (disparity index of 137) or on Local Programs contracts (disparity index of 130). However, MBE/WBE utilization and availability were much lower for WSDOT (Utilization = 10.0%; Availability = 7.3%) than for Local Programs contracts (Utilization = 20.5%; Availability = 15.8%). Local Programs contracts tended to be much smaller in size than WSDOT contracts, so they may have been more accessible to MBE/WBEs.



With regard to individual MBE/WBE groups, disparity analysis results indicated the following:

- Subcontinent Asian American- (disparity index of 2), Hispanic American- (disparity index of 52), and Native American-owned businesses (disparity index of 65) showed substantial disparities on WSDOT contracts.
- Only Hispanic American-owned businesses (disparity index of 53) showed substantial disparities on Local Programs contracts.

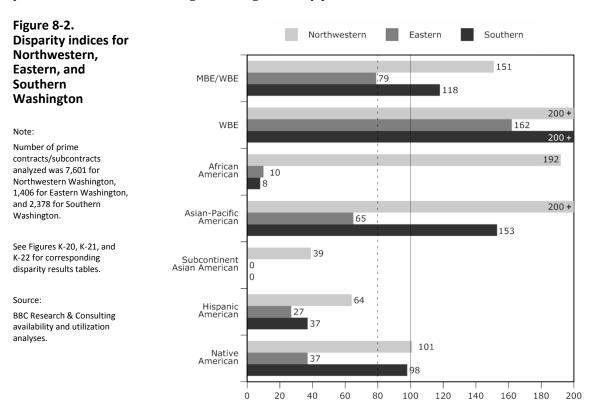
For details about MBE/WBE utilization and availability on WSDOT and Local Programs contracts, see Figures K-23 and K-24 in Appendix K.

B. Are there disparities in different areas of the state?

BBC examined whether there were disparities for MBE/WBEs on WSDOT and local agency contracts that were performed in different areas of Washington. BBC grouped the six WSDOT regions into three distinct areas of the state:

- Northwestern Washington, which includes the Olympic and Northwest regions;
- Eastern Washington, which includes the North Central and Eastern regions; and
- **Southern Washington**, which includes the South Central and Southwest regions.

Figure 8-2 presents disparity analysis results for each area of Washington. Overall, MBE/WBEs did not exhibit disparities in either Northwestern Washington (disparity index of 151) or in Southern Washington (disparity index of 118). However, they did exhibit a substantial disparity in Eastern Washington (disparity index of 79). That disparity existed despite WSDOT's use of contract-specific DBE goals and voluntary MBE/WBE goals on many contracts that were performed in Eastern Washington during the study period.



With regard to individual MBE/WBE groups by region, disparity analysis results indicated the following:

- Subcontinent Asian American- and Hispanic American-owned businesses showed substantial disparities in all three areas of Washington.
- African American-owned businesses showed substantial disparities in both Eastern Washington (disparity index of 10) and Southern Washington (disparity index of 8).
- Asian-Pacific American-owned businesses (disparity index of 65) and Native American-owned businesses (disparity index of 37) showed substantial disparities only in Eastern Washington.
- WBEs did not show disparities in any area of the state.

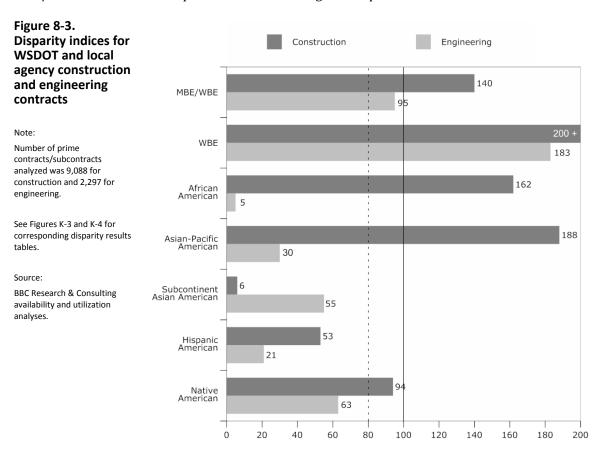
For details about MBE/WBE utilization and availability on contracts in Northwestern, Eastern, and Southern Washington, see Figures K-20, K-21, and K-22 in Appendix K.

C. Are there disparities for construction and engineering contracts?

The transportation contracts that WSDOT and local agencies awarded during the study period included both construction and engineering contracts. Those contracts differed in terms of the measures that WSDOT applied to encourage DBE and MBE/WBE participation during the study period:

- **Construction contracts.** WSDOT applied contract-specific DBE goals to many FHWA-funded construction contracts and applied voluntary MBE/WBE goals to many state-funded construction contracts. Contractors were not required to meet the voluntary MBE/WBE goals or show good faith efforts to do so.
- **Engineering contracts.** WSDOT did not apply contract-specific DBE goals or voluntary MBE/WBE goals to any engineering contracts, regardless of funding source.

BBC compared disparity analysis results between construction and engineering contracts as one way to assess the impact of race- and gender-conscious measures on the participation of MBE/WBEs in WSDOT transportation contracts. Figure 8-3 presents those results.



Overall, MBE/WBEs did not show substantial disparities on either construction contracts (disparity index of 140) or engineering contracts (disparity index of 95). However, individual MBE/WBE groups showed substantial disparities based on industry:

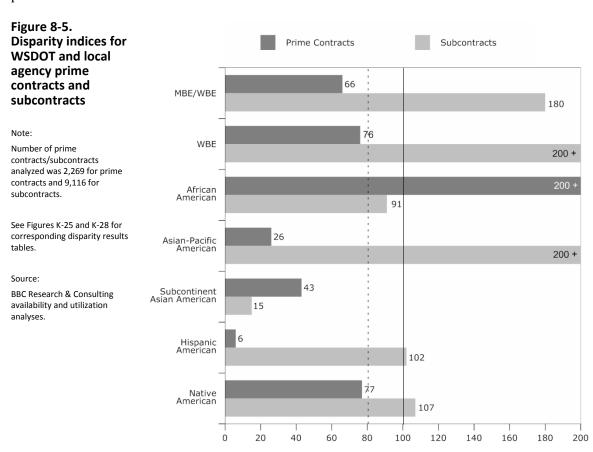
 Subcontinent Asian American- (disparity index of 6) and Hispanic American-owned businesses (disparity index of 53) showed substantial disparities on construction contracts.

- All MBE groups exhibited substantial disparities on engineering contracts, to which only race- and gender-neutral measures applied.
- WBEs did not show disparities on either construction contracts or engineering contracts.

For details about MBE/WBE utilization and availability on construction and engineering contracts, see Figures K-3 and K-4 in Appendix K.

D. Are there disparities for prime contracts and subcontracts?

The DBE contracting goals and the voluntary MBE/WBE goals that WSDOT used on many transportation contracts during the study period applied primarily to subcontracting opportunities. BBC examined disparity analysis results separately for prime contracts and subcontracts as another way to assess the potential effects of race- and gender-conscious measures on the participation of MBE/WBEs in WSDOT transportation contracts. Figure 8-5 presents those results.



Overall MBE/WBEs did not show a disparity on subcontracts (disparity index of 180). However, they showed a substantial disparity on prime contracts that WSDOT and local agencies awarded during the study period (disparity index of 66). Key results for individual MBE/WBE groups and for different contractor roles include the following:

■ Subcontinent Asian American-owned businesses showed substantial disparities on both prime contracts (disparity index of 43) and subcontracts (disparity index of 15).

- WBEs, Asian-Pacific American-owned businesses, Hispanic American-owned businesses, and Native American-owned businesses showed substantial disparities on prime contracts but not on subcontracts.
- African American-owned businesses did not show substantial disparities on either prime contracts (disparity index of 200+) or subcontracts (disparity index of 91). However, with regard to prime contracts, *all* of the dollars that went to African American-owned businesses went to a single African American-owned business that was not DBE-certified.

For details about MBE/WBE utilization and availability on prime contracts and subcontracts, see Figures K-25 and K-28 in Appendix K.

E. Does contract size explain any disparities for prime contracts?

BBC compared "large" prime contracts and "small" prime contracts that WSDOT and local agencies awarded during the study period to assess whether contract size affected disparity analysis results for prime contracts. "Large" prime contracts were defined as construction contracts worth more than \$2 million and engineering contracts worth more than \$500,000. "Small" prime contracts were defined as construction contracts worth \$2 million or less and engineering contracts worth \$500,000 or less. Figure 8-6 presents disparity analysis results for large and small prime contracts.

Figure 8-6.
Disparity indices for WSDOT and local agency large prime contracts and small prime contracts

Note:

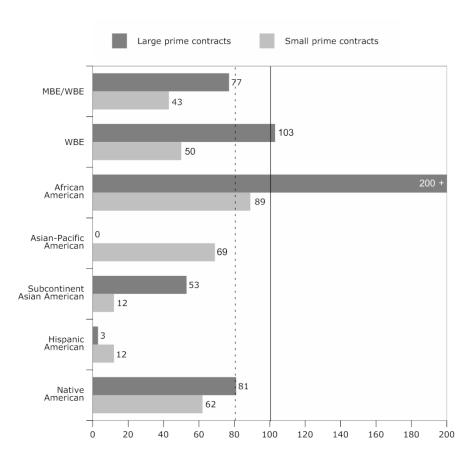
Number of prime contracts/subcontracts analyzed was 460 for large prime contracts and 1,809 for small prime contracts.

Large prime contracts were construction contracts worth more than \$2 million and engineering contracts worth more than \$500,000. Small prime contracts were construction contracts worth \$2 million or less and engineering contracts worth \$500,000 or less.

See Figures K-37 and K-38 for corresponding disparity results tables.

Source:

BBC Research & Consulting availability and utilization analyses.



As shown in Figure 8-6, MBE/WBEs showed substantial disparities on both large prime contracts (disparity index of 77) and small prime contracts (disparity index of 43). Key results for individual MBE/WBE groups and for different contract sizes include the following:

- Asian-Pacific American-, Subcontinent Asian American- and Hispanic American-owned businesses all showed substantial disparities on both large and small prime contracts.
- WBEs and Native American-owned businesses did not show substantial disparities for large prime contracts (although Native American-owned businesses exhibited a disparity index of 81, close to the threshold of 80 that some courts use as an indication of a substantial disparity), but both groups showed substantial disparities for small prime contracts.
- African American-owned businesses did not show substantial disparities on large prime contracts (disparity index of 200+) or on small prime contracts (disparity index of 89), but *all* of the dollars that went to African American-owned businesses on prime contracts went to a single African American-owned business that was not DBE-certified.

For details about MBE/WBE utilization and availability on large and small prime contracts, see Figures K-37 and K-38 in Appendix K.

F. Do bid/proposal processes explain any disparities for prime contracts?

BBC completed a case study analysis to assess whether characteristics of WSDOT's bid or proposal evaluation processes help to explain any of the disparities that the study team observed on prime contracts. BBC analyzed bid and proposal information from stratified random samples of construction and engineering contracts that WSDOT awarded during the study period.

Construction bids. BBC examined bid information for a stratified random sample of 87 construction contracts that WSDOT awarded in federal fiscal years (FFYs) 2009 through 2011. In total, 468 bids were submitted for those contracts.

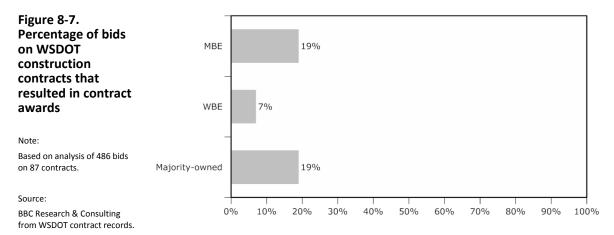
Number of bids from MBE/WBEs. MBE/WBEs submitted 30 of the 468 bids (6%):

- 16 bids (3% of all bids) came from MBEs (6 different businesses); and
- 14 bids (3% of all bids) came from WBEs (10 different businesses).

As part of the availability interviews, the study team asked construction business owners/managers to indicate whether their companies compete as prime contractors. Among business owners/managers that indicated that their companies compete as prime contractors, 20 percent represented MBEs and 13 percent represented WBEs. Those percentages were higher than the percent of MBEs and WBEs that actually submitted bids on the WSDOT construction contracts that BBC included in the case study sample. Appendix H (specifically, Figure H-2) provides more information about those availability interview results.

Success of bids. BBC also examined the percentage of bids that MBE/WBEs submitted that resulted in contract awards. As shown in Figure 8-7, 19 percent of the bids that MBEs submitted resulted in contract awards, which was equal to the percent of bids that non-Hispanic white male-owned businesses (i.e., majority-owned businesses) submitted that resulted in contract awards. Only 7 percent of the bids that WBEs submitted resulted in contract awards. Moreover,

on one contract, a low bid from a WBE did not result in a contract award. (WSDOT deemed that bid to be non-responsive.) No such cases existed for MBE bids.



Engineering proposals. BBC examined proposal information for a stratified random sample of 40 WSDOT engineering contracts for FFYs 2009 through 2011. WSDOT was unable to provide complete proposal evaluation information for 19 of those contracts, because they were sole-sourced. WSDOT was able to provide complete proposal evaluation information for the remaining 21 contracts. In total, 242 proposals were submitted for those 21 contracts.

Number of bids from MBE/WBEs. MBE/WBEs submitted 21 of the 242 proposals (9%):

- 6 proposals (3% of all proposals) came from MBEs (5 different businesses); and
- 15 proposals (6% of all proposals) came from WBEs (14 different businesses).

Among engineering business owners/managers that indicated in availability interviews that their companies compete as prime contractors, 10 percent represented MBEs and 9 percent represented WBEs, higher than the percent of MBEs and WBEs that actually submitted proposals on the WSDOT engineering contracts that the study team included in the case study sample.

Success of proposals. BBC examined the success rates of the proposals that MBE/WBEs submitted on WSDOT engineering contracts. For the contracts included in the case study sample, BBC examined the percentage of proposals for MBEs, WBEs, and majority-owned businesses that were short listed and the percentage that resulted in contract awards. Of the 21 proposals that MBE/WBEs submitted on WSDOT engineering contracts, 8 were short listed and none resulted in contract awards.

BBC also examined evaluation scores that WSDOT awarded to proposers for individual evaluation categories (e.g., qualifications and past experience). However, because of the relatively small number of contracts included in the case study analysis, the study team did not observe any substantial differences in the evaluation scores that WSDOT awarded to MBE/WBEs and majority-owned businesses.

CHAPTER 9. Overall DBE Goal

As part of its implementation of the Federal Disadvantaged Business Enterprise (DBE) Program, the Washington State Department of Transportation (WSDOT) is required to set an overall goal for DBE participation on its Federal Highway Administration (FHWA)-funded transportation contracts. The Final Rule effective February 28, 2011 revised requirements for goal-setting so that agencies that implement the Federal DBE Program only need to develop overall DBE goals every three years. However, the overall DBE goal is an *annual* goal in that an agency must monitor DBE participation in its USDOT-funded contracts every federal fiscal year (FFY). If DBE participation for a particular FFY is less than the overall DBE goal for that year, then the agency must analyze the reasons for the difference, and establish specific measures to address the difference and enable the agency to meet the goal in the next FFY.

WSDOT last developed its overall DBE goal in 2011 for FFYs 2012 through 2014 (a goal of 15.17%). WSDOT is required to develop a new goal for FFYs 2015 through 2017. However, the agency intends on using information from the disparity study to amend its overall DBE goal for FFYs 2012 through 2014.

WSDOT must prepare and submit a Goal and Methodology document to FHWA that presents its overall DBE goal that is supported by information about the steps that WSDOT used to develop the goal. Chapter 9 provides information that WSDOT might consider as part of setting its overall DBE goal. Chapter 9 is organized in two parts that are based on the two-step process that 49 Code of Federal Regulations (CFR) Part 26.45 outlines for agencies to set their overall goals:

- A. Establishing a base figure; and
- B. Consideration of a step-2 adjustment.

A. Establishing a Base Figure

Establishing a base figure is the first step in calculating an overall goal for DBE participation in WSDOT's FHWA-funded transportation contracts. As presented in Chapter 5, potential DBEs — that is, minority- and women-owned business enterprises (MBE/WBEs) that are DBE-certified or appear that they could be DBE-certified based on annual revenue limits described in 49 CFR Part 26 — might be expected to receive 8.4 percent of WSDOT's FHWA-funded transportation prime contract and subcontract dollars based on their availability for that work. WSDOT might consider 8.4 percent as the base figure for its overall DBE goal if it anticipates that the types, sizes, and locations of FHWA-funded contracts that it will award in the future are reasonably similar to the FHWA-funded contracts that the agency awarded during the study period.

Figure 9-1 presents the construction and engineering components of the base figure for WSDOT's overall DBE goal. The availability estimates presented in Figure 9-1 are based on the availability of potential DBEs for FHWA-funded prime contracts and subcontracts. The overall base figure reflects a weight of 94 percent for construction contracts and 4 percent for engineering contracts, based on the dollars of FHWA-funded contracts that WSDOT awarded during the study period. If WSDOT expects that the relative distributions of FHWA-funded

construction and engineering contract dollars will change substantially in the future, the agency might consider applying different weights to the corresponding base figure components. WSDOT might also consider evaluating whether the types, sizes, and locations of the FHWA-funded construction and engineering contracts that it awards will change substantially in the future.

Figure 9-1.

Availability components of the base figure
(based on availability of potential DBEs for FHWA-funded transportation contracts)

	Availa	Availability percentage			
Potential DBEs	Construction	Engineering	Total		
African American-owned	0.8 %	1.3 %	0.8 %		
Asian-Pacific American-owned	0.5	0.8	0.5		
Subcontinent Asian American-owned	0.3	3.3	0.5		
Hispanic American-owned	1.9	0.6	1.8		
Native American-owned	1.8	2.1	1.8		
WBE (white women-owned)	2.7	4.9	2.9		
Total potential DBEs	8.1 %	12.9 %	8.4 %		
Industry weight	94 %	6 %			

Note: Numbers rounded to nearest tenth of 1 percent. Numbers may not add to totals due to rounding. See Figures K-39, K-40, and K-41 in Appendix K for corresponding disparity results tables.

Source: BBC Research & Consulting availability analysis.

B. Consideration of a Step-2 Adjustment

The Federal DBE Program requires WSDOT to consider a potential step-2 adjustment to the base figure as part of determining its overall DBE goal. WSDOT is not required to make a step-2 adjustment as long as it considers appropriate factors and explains its decision in its Goal and Methodology document. The Federal DBE Program outlines several factors that an agency must consider when assessing whether to make a step-2 adjustment to its base figure:

- 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.1

BBC completed an analysis of each of the above step-2 factors and was able to quantify the effect of certain factors on the base figure. Other information that BBC examined was not as easily quantifiable but is still relevant to WSDOT as it determines whether to make a step-2 adjustment.

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¹ 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. The United States Department of Transportation's (USDOT's) "Tips for Goal-Setting" suggests that agencies should examine data on past DBE participation on their USDOT-funded contracts in recent years. USDOT further suggests that agencies should choose the median level of annual DBE participation for those years as the measure of past participation:

Your goal setting process will be more accurate if you use the median (instead of the average or mean) of your past participation to make your adjustment because the process of determining the median excludes all outlier (abnormally high or abnormally low) past participation percentages.²

Figure 9-2 presents past DBE participation based on WSDOT Uniform Reports of DBE Awards or Commitments and Payments, as reported to FHWA. According to WSDOT Uniform Reports, median DBE participation on WSDOT's FHWA-funded contracts from FFYs 2009 through 2011 was 9.4 percent (see DBE attainment for FFY 2009).³

Figure 9-2.
WSDOT reported past DBE participation on FHWA-funded contracts, FFYs 2009-2011

FFY	DBE attainment	Annual DBE goal	Difference
2009	9.4 %	15.9 %	-6.5 %
2010	11.6	15.5	-3.9
2011	6.5	15.5	-9.0

Source: Commitments/Awards reported on WSDOT Uniform Reports of DBE Awards/Commitments and Payments.

The information about past DBE participation supports an upward adjustment to WSDOT's base figure. If WSDOT were to use the approach that USDOT outlined in "Tips for Goals Setting," the overall goal would be the average of the 8.4 percent base figure and the 9.4 percent median past DBE participation, yielding a potential overall DBE goal of 8.9 percent.

2. Information related to employment, self-employment, education, training, and unions. Chapter 4 summarizes information about conditions in the Washington transportation contracting industry for minorities, women, and MBE/WBEs. Detailed quantitative analyses of marketplace conditions in Washington are presented in Appendices E through H. BBC's analyses indicate that there are barriers that certain minority groups and women face related to entry and advancement and business ownership in the Washington construction and engineering industries. Such barriers may affect the availability of MBE/WBEs to obtain and perform WSDOT transportation contracts.

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² Section III (A)(5)(c) in USDOT's "Tips for Goal-Setting in the Federal Disadvantaged Enterprise (DBE) Program." http://www.osdbu.dot.gov/DBEProgram/tips.cfm

³ BBC's analysis of DBE participation for FHWA-funded contracts from FFY 2009 through FFY 2011 indicated MBE/WBE utilization of 4.3 percent.

Although it may not be possible to quantify the cumulative effects that barriers in employment, education, and training may have on the availability of MBE/WBEs in the Washington transportation contracting industry, the effects of barriers in business ownership can be quantified. BBC used regression analyses to investigate whether race/ethnicity or gender affects rates of business ownership among workers in the Washington construction and engineering industries. The regression analyses allowed BBC to examine those effects while statistically controlling for various race- and gender-neutral personal characteristics including education and age. (Appendix F provides detailed results of BBC's business ownership regression analyses.)⁴

The regression analyses revealed that Hispanic Americans and women were less likely than non-Hispanic whites and males to own construction businesses, even after accounting for various race- and gender-neutral personal characteristics. In contrast, there were no statistically significant differences in business ownership rates for minorities and women working in the Washington engineering industry after statistically controlling for neutral factors. However, that result does not necessarily indicate that minorities and women have the same opportunities to own businesses in the Washington engineering industry as non-Hispanic white males (for example, see the qualitative information in Appendix J).

BBC analyzed the impact that barriers in business ownership would have on the base figure if the groups of minorities and women that exhibited statistically significant disparities in rates of business ownership owned businesses at the same rate as similarly-situated non-Hispanic white males. The results of that analysis — sometimes referred to as a "but for" analysis, because it estimates the availability of MBE/WBEs *but for* the effects of race- and gender-based discrimination — are presented in Figure 9-3.

The analysis included the same contracts that the study team analyzed to determine the base figure (i.e., FHWA-funded construction and engineering prime contracts and subcontracts that WSDOT awarded during the study period). BBC made "but for" adjustments to MBE/WBE availability for construction contracts and then weighted those results with availability information for engineering contracts. (There were no "but for" adjustments for engineering contracts due to the lack of statistically significant disparities in business ownership rates for minorities and women in engineering.) The construction and engineering weights were based on the proportion of FHWA-funded contract dollars that WSDOT awarded in each industry during the study period (i.e., a 94% weight for construction and a 6% weight for engineering). In that way, BBC determined an overall base figure that adjusted for race- and gender-based barriers in business ownership in the local transportation contracting industry.

The rows and columns of Figure 9-3 present the following information from BBC's "but for" analyses:

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⁴ BBC examined U.S. Census data on business ownership rates using methods similar to analyses examined in court cases involving state departments of transportation in California, Illinois, and Minnesota.

Figure 9-3.

Potential step-2 adjustment considering disparities in the rates of business ownership

Indu	stry and group	a. Current availability	b. Disparity index for business ownership	c. Availability after initial adjustment*	d. Availability after scaling to 100%	e. Components of base figure**
Cons	struction					
(1)	African American	0.8 %	n/a	0.8 %	0.8 %	
(2)	Asian-Pacific American	0.5	n/a	0.5	0.5	
(3)	Subcontinent Asian American	0.3	n/a	0.3	0.3	
(4)	Hispanic American	1.9	41	4.6	4.5	
(5)	Native American	1.8	n/a	1.8	1.7	
(6)	WBE	2.7	68	4.0	3.8	
(7)	Potential DBEs	8.1 %	n/a	12.0 %	11.6 %	10.8 %
(8)	All other businesses ***	91.9	n/a	91.9	88.4	
(9)	Total firms	100.0 %	n/a	103.9 %	100.0 %	
Engi	neering					
(10)	African American	1.3 %	n/a	1.3 %	1.3 %	
(11)	Asian-Pacific American	0.8	n/a	0.8	0.8	
(12)	Subcontinent Asian American	3.3	n/a	3.3	3.3	
(13)	Hispanic American	0.6	n/a	0.6	0.6	
(14)	Native American	2.1	n/a	2.1	2.1	
(15)	White women	4.9	n/a	4.9	4.9	
(16)	Potential DBEs	12.9 %	n/a	12.9 %	12.9 %	0.8 %
(17)	All other businesses	87.1	n/a	87.1	87.1	
(18)	Total firms	100.0 %	n/a	100.0 %	100.0 %	
(19)	Total	8.4 %	n/a	n/a		11.6 %

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

Source: BBC Research & Consulting.

- MBE/WBE group and by industry, as also presented in Figure 9-1. Each row presents the percentage availability for each MBE/WBE group. Combined, the current availability of potential DBEs for WSDOT FHWA-funded construction and engineering contracts is 8.4 percent, as shown in row (19) of column (a).
- b. Disparity indices for business ownership. For each group that is significantly less likely than similarly-situated non-Hispanic white males to own construction or engineering businesses, BBC simulated business ownership rates if those groups owned businesses at the same rate as non-Hispanic white males who share the same race- and gender-neutral personal characteristics. The study team then calculated a business ownership disparity index for each group by dividing the observed business ownership rate by the simulated

 $^{^{}st}$ Initial adjustment is calculated as current availability divided by the disparity index.

^{**} Components of the base figure were calculated as the value after adjustment and scaling to 100 percent, multiplied by the percentage of total FWHA-funded contract dollars in each industry (construction = 94%, engineering = 6%).

^{***} All other businesses included majority-owned businesses and MBE/WBEs that were not potential DBEs.

business ownership rate and then multiplying the result by 100. Values of less than 100 indicate that, in reality, the group is less likely to own businesses than what would be expected for non-Hispanic white males who share the same personal characteristics.

Column (b) presents disparity indices related to business ownership for the different racial/ethnic and gender groups. For example, as shown in row (4) of column (b), Hispanic Americans own construction businesses at 41 percent of the rate that they would be expected to own construction businesses based on the simulated business ownership rates of non-Hispanic white males who share the same personal characteristics.

- MBE/WBE group and by industry after initially adjusting for statistically significant disparities in business ownership rates. 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. Note that BBC only made adjustments for those groups that are significantly less likely than similarly-situated non-Hispanic white males to own businesses. (For that reason, BBC did not make any adjustments for engineering businesses.)
- d. Availability after scaling to 100 percent. Column (d) shows adjusted availability estimates that the study team re-scaled so that the sum of the availability estimates equaled 100 percent for each industry. 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) in row (9) for construction and in row (18) for engineering and multiplying by 100. For example, the scaled availability estimate for Hispanic American-owned construction businesses shown in row (4) of column (d) was calculated in the following way: (4.6% ÷ 103.9%) x 100 = 4.5 percent.
- e. Components of goal. Column (e) shows the component of the total base figure attributed to the adjusted MBE/WBE availability for each industry. BBC calculated each component by taking the total availability estimate shown under "Potential DBEs" in column (d) in row (7) for construction and in row (16) for engineering and multiplying it by the proportion of total FHWA-funded contract dollars for which each industry accounts (i.e., 94% for construction and 6% for engineering). For example, BBC used the 11.6 percent shown in row (7) of column (d) for construction and multiplied it by 94 percent for a result of 10.8 percent (see row (7) of column (e)). The values in column (e) were then summed to equal the overall base figure adjusted for barriers in business ownership 11.6 percent, as shown in the bottom row of column (e).

Based on information related to business ownership alone, WSDOT might consider an upward adjustment to the base figure ranging up to 11.6 percent.

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

BBC's analysis of access to financing, bonding, and insurance revealed quantitative and qualitative evidence that minorities, women, and MBE/WBEs do not have the same access to those business inputs as white males and majority-owned businesses in Washington. Any barriers to obtaining financing, bonding, and insurance might affect opportunities for minorities and women to successfully form and operate construction and engineering businesses in the Washington marketplace. Any barriers that MBE/WBEs face in obtaining financing, bonding, and

insurance would also place those businesses at a disadvantage in obtaining WSDOT and local agency transportation prime contracts and subcontracts.

The information about financing, bonding, and insurance supports an upward step-2 adjustment to WSDOT's base figure.

4. Other factors. The Federal DBE Program suggests that federal aid recipients also examine "other factors" when determining whether to make any step-2 adjustments to their base figures.⁵

Mix of transportation contracts. The mix of the types and sizes of transportation contracts that WSDOT and local agencies awarded in FFYs 2009, 2010, and 2011 may not have been representative of the transportation contracts that WSDOT and local agencies typically award. For example, FHWA provided more than \$500 million in American Recovery and Reinvestment Act (ARRA) dollars to WSDOT during the study period for highway projects. Those and other funds may have led WSDOT to award larger transportation contracts, thus potentially limiting the availability of potential DBEs as prime contractors.

For comparison, BBC examined the availability of potential DBEs for FHWA-funded transportation-related construction contracts between May 9, 2005 and September 30, 2006. Those contracts were awarded prior to the economic downturn of 2008 and were not affected by ARRA dollars. The types and sizes of transportation contracts that WSDOT and local agencies awarded during that time period may have been more representative of the overall mix of FHWA-funded transportation contracts that WSDOT and local agencies anticipate awarding in the future. Potential DBEs would have been available for 14.9 percent of WSDOT's FHWA-funded transportation prime contract and subcontract dollars between May 9, 2005 and September 30, 2006, considerably higher than the 8.4 percent base figure. Based on that information, WSDOT might consider an upward step-2 adjustment to the base figure if it considers the FHWA-funded transportation contracts from May 9, 2005 and September 30, 2006 to be representative of the anticipated mix of its future FHWA-funded transportation contracts.

Success of businesses. There is quantitative evidence that certain groups of MBE/WBEs are less successful than majority-owned businesses and face greater barriers in the marketplace, even after considering race- and gender-neutral factors. Chapter 4 summarizes that evidence and Appendix H presents corresponding quantitative analyses. There is also qualitative evidence of barriers to the success of MBE/WBEs, as explored in Appendix J (and also summarized in Chapter 4). Some of that information suggests that discrimination on the basis of race/ethnicity and gender affects MBE/WBEs in the Washington transportation contracting industry.

Initiative 200. Initiative 200 amended state law to prohibit the use of race- and gender-based preferences in public contracting, public employment, and public education, unless such requirements are required "to establish or maintain eligibility for any federal program, if ineligibility would result in a loss of federal funds to the state." Thus, Initiative 200 prohibited

6 RCW 49.60.400(1)

⁵ 49 CFR Section 26.45

government agencies in Washington from applying race- and gender-conscious programs (e.g., contract-specific DBE goals) to state-funded contracts but not necessarily to USDOT-funded contracts.

Many business owners and others knowledgeable about the Washington transportation contracting industry report that many MBEs and WBEs closed as a result of Initiative 200 and the prohibition of race- and gender-conscious programs on state-funded contracts (see Appendix J). Consistent with those claims, some academic research that has examined business ownership before and after the passing of Initiative 200 has suggested adverse effects for minorities, women, and MBE/WBEs as a result of the measure.⁷

In sum, there is evidence that the existing availability of MBEs and WBEs for WSDOT and local agency transportation contracts is reduced from what it might be if a level playing field existed for minorities, women, and MBE/WBEs working in the industry. Taken together, the quantitative and qualitative evidence that the study team collected as part of the disparity study supports an upward step-2 adjustment as WSDOT considers setting its overall DBE goal.

Approaches to making a step-2 adjustment. As noted in USDOT's "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.⁸

Based on information from the disparity study, there are several reasons why WSDOT might consider an upward adjustment to the 8.4 percent base figure:

- WSDOT must consider the volume of work DBEs have performed in recent years when determining whether to make a step-2 adjustment to its base figure. WSDOT utilization reports for FFYs 2009 through 2011 indicated median annual DBE participation of 9.4 percent for those years, which is higher than the 8.4 percent base figure. USDOT's "Tips for Goal-Setting" suggests that an agency can make a step-2 adjustment by averaging the base figure with past median DBE participation. If WSDOT chooses that approach, the 8.4 percent base figure would be averaged with the 9.4 percent past median DBE participation for an overall DBE goal of 8.9 percent.
- WSDOT might make an upward adjustment to its base figure ranging up to 11.6 percent to account for barriers that minorities and women face in owning businesses in the Washington transportation contracting industry. Such an adjustment would correspond to a "determination of the level of DBE participation you would expect absent the effects of discrimination."

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⁷ Fairlie, R. & Marion, J. 2007. "Affirmative Action Programs and Business Ownership among Minorities and Women." Ford Foundation and National Economic Development and Law Center.

⁸ USDOT. "Tips for Goal-Setting in the Federal Disadvantaged Enterprise (DBE) Program." http://www.osdbu.dot.gov/DBEProgram/tips.cfm

⁹ 49 CFR Section 26.45 (b)

- An upward adjustment is further supported by the availability of potential DBEs for FHWA-funded transportation-related construction contracts that WSDOT and local agencies awarded between May 9, 2005 and September 30, 2006. Those contracts were awarded prior to the economic downturn of 2008 and were not affected by ARRA funds. If WSDOT determines that the mix of the types and sizes of contracts in that time period is representative of future FHWA-funded contracts, then it might consider an upward adjustment to its base figure ranging up to 14.9 percent.
- An upward adjustment is also supported by the evidence of barriers that affect minorities, women, and MBE/WBEs in obtaining financing, bonding, and insurance; evidence that certain groups of MBE/WBEs are less successful than comparable majority-owned businesses; and potential adverse effects of Initiative 200 on MBE/WBEs.
- If WSDOT chose to average its base figure of 8.4 percent, the 9.4 percent past median DBE participation, the 11.6 "but for" figure described in Figure 9-3, and the 14.9 percent availability for contracts between May 9, 2005 and September 30, 2006, the result would be an overall goal of 11.1 percent (such averaging would be consistent with certain approaches outlined in "Tips for Goal-Setting").

USDOT regulations clearly state that an agency such as WSDOT is required to review a broad range of information when considering whether it is necessary to make a step-2 adjustment, either upward or downward, to its base figure. However, USDOT's "Tips for Goal-Setting" states that an agency such as WSDOT is not required to make an adjustment as long as it can explain what factors it considered and can explain its decision in its Goal and Methodology document.

CHAPTER 10. Portion of DBE Goal to be Met through Race- and Gender-Neutral Means

The Federal Disadvantaged Business Enterprise (DBE) Program requires state and local transportation agencies to meet the maximum feasible portion of their overall DBE goals using race- and gender-neutral measures. Race- and gender-neutral measures are initiatives that encourage the participation of all businesses — or, all small businesses — and are not specifically limited to minority- and women-owned business enterprises (MBE/WBEs) or to DBEs. An agency must determine whether it can meet its overall DBE goal solely through neutral means or whether race- and gender-conscious measures — such as DBE contract goals — are also needed. As part of doing so, an agency must project the portion of its overall DBE goal that it expects to meet through race- and gender-neutral means and what portion it expects to meet through race- and gender-conscious measures.

- If an agency determines that it can meet its overall DBE goal solely through race- and gender-neutral means, then the agency would propose using only neutral measures as part of its program. The agency would project that 100 percent of its overall DBE goal would be met through neutral means and that 0 percent would be met through race- and gender-conscious means.
- If an agency determines that a combination of race- and gender-neutral and race- and gender-conscious measures are needed to meet its overall DBE goal, then the agency would propose using a combination of neutral and conscious measures as part of its program. The agency would project that some percent of its overall DBE goal would be met through neutral means, and that the remainder would be met through race- and gender-conscious means.

USDOT offers guidance concerning how a transportation agency should project the portion of its overall DBE goal that it will meet through race- and gender-neutral and race- and gender-conscious measures, including the following:

- "USDOT Questions and Answers about 49 CFR Part 26" addresses factors for federal aid recipients to consider when projecting the portions of their overall DBE goals that they will meet through race- and gender-neutral means.²
- USDOT's "Tips for Goal-Setting" also suggests factors for federal aid recipients to consider when making such projections.³

¹ 49 CFR Section 26.51

² http://www.dotcr.ost.dot.gov/Documents/Dbe/49CFRPART26.doc

³ http://www.osdbu.dot.gov/DBEProgram/tips.cfm

A Federal Highway Administration (FHWA) template for how it considers approving DBE goal and methodology submissions includes a section on projecting the percentage of overall DBE goals to be met through neutral and conscious means. An excerpt from that template is provided in Figure 10-1.

Based on 49 Code of Federal Regulations (CFR) Part 26 and the resources above, general areas of questions that transportation agencies might ask related to making any projections include:

- A. Is there evidence of discrimination within the local transportation contracting marketplace for any racial/ethnic or gender groups?
- B. What has been the agency's past experience in meeting its overall DBE goal?
- C. What has DBE participation been when the agency did not use race- or gender-conscious measures?⁴
- D. What is the extent and effectiveness of race- and gender-neutral measures that the agency could have in place for the next fiscal year?

Chapter 10 is organized around each of those general areas of questions.

A. Is there evidence of discrimination within the local transportation contracting marketplace for any racial/ethnic or gender groups?

Figure 10-1. Excerpt from Explanation of Approval of [State] DBE Goal Setting Process for FY [Year]

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 race-neutral/race-conscious division. Appropriate information should give a sound analysis of the recipient's market, the raceneutral 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.

As discussed in Chapter 4, BBC examined conditions in the Washington marketplace, including:

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

There was quantitative evidence of disparities for MBE/WBEs overall and for specific groups concerning the above issues. Qualitative information also indicated some evidence of discrimination affecting the local marketplace. However, some minority and female business

⁴ To assess that question, USDOT guidance suggests evaluating (a) DBE participation as prime contractors if DBE contract goals did not affect utilization, (b) DBE participation as prime contractors and subcontractors for agency contracts without DBE goals, and (c) overall utilization for other state/local or private sector contracting where contract goals were not used.

owners that the study team interviewed as part of the disparity study did not think that their businesses had been affected by any race- or gender-based discrimination.

The Washington State Department of Transportation (WSDOT) should review the information about marketplace conditions presented in this report as well as other information it may have when considering the extent to which it can meet its overall DBE goal through race- and genderneutral measures.

B. What has been the agency's past experience in meeting its overall DBE goal?

Figure 10-2 presents the participation of certified DBEs on WSDOT transportation contracts in recent years, as presented in WSDOT reports to USDOT. Based on information about awards and commitments to DBE-certified businesses, WSDOT has not met its DBE goal in recent years. In federal fiscal years (FFYs) 2009, 2010, and 2011, DBE awards and commitments on FHWA-funded contracts was below WSDOT's overall DBE goal by an average of 6.5 percentage points. WSDOT applied a race- and gender-conscious contracting goals program to FHWA-funded construction contracts during those years.

Figure 10-2.
WSDOT reported past certified DBE participation on FHWA-funded contracts, FFYs 2009, 2010, and 2011

FFY	DBE attainment	Annual DBE goal	Difference
2009	9.4 %	15.9 %	-6.5 %
2010	11.6	15.5	-3.9
2011	6.5	15.5	-9.0

Source: Commitments/Awards reported on WSDOT Uniform Reports of DBE Awards/Commitments and Payments.

C. What has DBE participation been when the agency did not use race- or gender-conscious measures?

BBC analyzed various sets of contracts to which WSDOT did not apply contract-specific DBE goals during the study to examine certified DBE participation in the absence of race- and gender-conscious measures.

Utilization on state-funded contracts. During the study period, WSDOT applied contracts specific DBE goals to many FHWA-funded contracts but did not apply DBE goals to any state-funded contracts. Instead, WSDOT applied voluntary MBE/WBE goals to many state-funded contracts, but did not require contractors to meet those goals or show good faith efforts to do so. Figure 10-3 presents DBE utilization results for state-funded contracts by study period year. Overall, certified DBEs received 2.0 percent of the state-funded transportation contract dollars that WSDOT awarded during the study period. DBE utilization on those contracts declined during the study period, from 2.8 percent in FFY 2009 to 1.4 percent in FFY 2011.

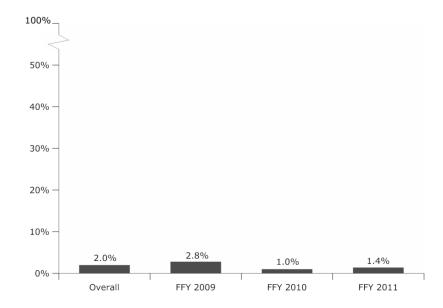
Figure 10-3.
Certified DBE utilization on state-funded WSDOT transportation contracts by year

Note:

Number of prime contracts/subcontracts analyzed was 2,064 overall, 759 for FFY 2009, 507 for FFY 2010, and 798 for FFY 2011. See Figures K-14, K-17, K-18, and K-19 for corresponding disparity results tables.

Source:

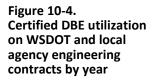
BBC Research & Consulting from WSDOT contracting data.



Utilization on engineering contracts. WSDOT and local agencies only used race- and gender-neutral measures to encourage MBE/WBE and DBE participation on engineering contracts during the study period. They did not apply contract-specific DBE goals or voluntary MBE/WBE goals to any engineering contracts, regardless of funding source. Figure 10-4 presents DBE utilization results for engineering contracts by study period year. Overall, certified DBEs received 2.6 percent of the transportation-related engineering contract dollars that WSDOT and local agencies awarded during the study period. DBE utilization on those contracts was highest in FFY 2009 (4.6%).

Utilization on Public Transportation Division (PTD) contracts. WSDOT administers some Federal Transit Administration (FTA)-funded construction and engineering contracts through its PTD division. PTD awards FTA-funded grants to local agencies, which use most of those dollars for expenditures that are unrelated to transportation construction or engineering contracts. However, local agencies use some of that grant money to fund construction and engineering projects, such as installing bus shelters and building or redesigning transit stations. Local agencies only used race- and gender-neutral measures to encourage MBE/WBE and DBE participation on PTD contracts during the study period. BBC's analyses indicated that there was 0 percent utilization of certified DBEs on PTD contracts during the study period.

WSDOT's utilization on FHWA-funded construction contracts in 2005-2006. BBC analyzed DBE utilization on FHWA-funded construction contracts that WSDOT and local agencies awarded between May 9, 2005 and September 30, 2006. WSDOT did not use contract-specific DBE goals or any other race-or gender-conscious measures on its FHWA-funded contracts during that time period in response to the May 2005 *Western States Paving Company vs. Washington State DOT* court decision. Overall, certified DBEs received 5.4 percent of the dollars on those contracts.

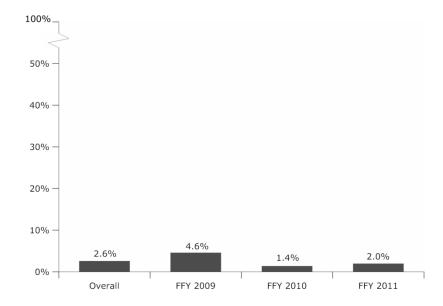


Note:

Number of prime contracts/subcontracts analyzed was 2,297 overall, 690 for FFY 2009, 948 for FFY 2010, and 659 for FFY 2011. See Figures K-4, K-34, K-35, and K-36 for corresponding disparity results tables.

Source:

BBC Research & Consulting from WSDOT contracting data.



Utilization on FHWA-funded contracts during the study period. For comparison, BBC also measured certified DBE participation on FHWA-funded transportation contracts that WSDOT and local awarded in FFYs 2009, 2010, and 2011. WSDOT and local agencies applied contract-specific DBE goals to many of those contracts. Figure 10-5 presents DBE utilization results for FHWA-funded contracts by group and by study period year. Overall, certified DBEs received 4.3 percent of the FHWA-funded transportation contract dollars that WSDOT awarded during the study period. DBE utilization on those contracts declined with each year of the study period, from 9.9 percent in FFY 2009 to just 1.9 percent in FFY 2011.

Utilization of potential DBEs on WSDOT contracts. Participation of certified DBEs would be higher if more MBE/WBEs that participate on, or are potentially available for, WSDOT and local agency prime contracts and subcontracts would become DBE-certified. For example, only 25 percent of the MBE/WBEs that the study team considered in the availability analysis are certified as DBEs (as of January 2012). Although not *all* of the MBE/WBEs that are currently uncertified would actually qualify for certification based on their revenues during the most recent three years, a relatively large number of uncertified MBE/WBEs appear to be eligible for DBE certification.⁵

For example, BBC examined the utilization of potential DBEs (MBE/WBEs that are currently DBE-certified or appear to meet the revenue requirements for DBE certification) on state-funded contracts. Potential DBEs obtained 4.4 percent of the contract dollars that WSDOT awarded on state-funded contracts. WSDOT might consider 4.4 percent as the minimum portion of its overall DBE goal that the agency could reach through race- and gender-neutral means if WSDOT was successful in encouraging all of those businesses to apply for DBE certification.

⁵ There are many reasons why many MBE/WBEs in Washington do not seek DBE certification, including perceptions that the process is lengthy and difficult, that certification has limited value, and that DBE certification might carry a negative stereotype. Appendix J provides further insights about DBE certification from non-certified and certified businesses.

Figure 10-5.
Certified DBE utilization on FHWA-funded
WSDOT and local agency transportation contracts by year

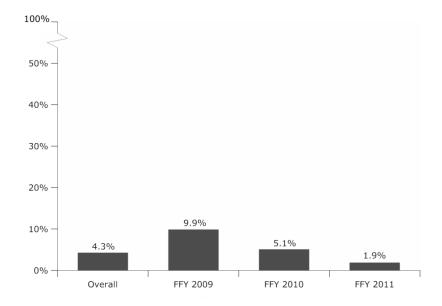


Number of prime contracts/subcontracts analyzed was 9,321 overall, 3,485 for FFY 2009, 3,376 for FFY 2010, and 2,460 for FFY 2011.

See Figures K-8, K-11, K-12, and K-13 for corresponding disparity results tables.

Source:

BBC Research & Consulting from WSDOT contracting data.



D. What is the extent and effectiveness of race- and gender-neutral measures that the agency could have in place for the next fiscal year?

When determining the extent to which WSDOT could meet its overall DBE goal through the use of race- and gender- neutral measures, the agency should review the neutral measures that it and other local organizations already have in place. WSDOT should also review measures that it has planned, or could consider, for future implementation.

Current race- and gender-neutral measures. WSDOT currently has a broad range of race-and gender-neutral measures in place to encourage the participation of all small businesses — including DBEs — in its transportation contracts. The agency plans on continuing the use of those measures in the future. WSDOT's race- and gender-neutral efforts can be classified into four categories:

- Business outreach and communication;
- Technical assistance;
- Improved contracting processes; and
- Data collection, monitoring, and reporting.

Figure 10-6 summarizes race- and gender-neutral programs that WSDOT currently has in place.

Figure 10-6.
Current WSDOT race- and gender-neutral measures

Current measures				
Provides plans and specifications to small businesses, including DBEs, statewide	Encourages firms that could potentially qualify for DBE certification to apply			
Offers enrollment in business related courses	Trains internal staff on the social and economical importance of supplier diversity, diverse supplier sourcing techniques, proper DBE reporting, and the benefits of certifications			
Provides training programs				
Conducts on-site reviews of all DBE contractors performing work on contracts to verify that DBEs are performing commercially useful functions	Offers technical assistance in estimating and bidding; financing and accounting; prompt payment and retainage; and general business practices			
Has prompt payment mechanisms that require prime contractors to pay subcontractors within 10 business days of	Offers enrollment in business development programs			
receiving payment from WSDOT	Sponsors outreach at the annual Regional Contracting Forum and other networking events			
Operates a DBE fraud and abuse hotline	Works with the Washington State DBE Work Group, which advises WSDOT on DBE issues			
Contacts all qualified certified DBE firms in the database, which shows relevant NAICS classifications for engineering contracts	Offers DBE-certified firms individual business counseling services			
Operates the Washington Electronic Business Solution program to disseminate notifications of available WSDOT	Conducts outreach events with small businesses statewide			
contracts	Operates the Small Business Portal, which is available at: www.wsdot.wa.gov/Business/opportunities/			
Hosts roundtables for the DBE community	Contracts with the Seattle Business Assistance Center to assist			
Utilizes a Limited Public Works roster for awarding contracts under \$35,000 to businesses that have less than \$1 million in average gross receipts	small, minority-owned, and women-owned businesses in obtaining certification and with bidding on transportation projects			
Tracks whether there are adequate contracts of a reasonable size for small businesses	Hosts pre-bid meetings and site walkthroughs			
Maintains a bidder's list	Offers DBE training and one-on-one consulting sessions on construction and consulting-related issues.			

 $Source: \quad Washington \, State \, Department \, of \, Transportation \, Office \, of \, Equal \, Opportunity, \, 2012.$

Business outreach and communication. WSDOT conducts several outreach and communication efforts across the state of Washington to encourage the utilization and growth of small businesses and MBE/WBEs. Those efforts include:

- Meetings and relationship building;
- Website and communications;
- Advertisements of contract opportunities; and
- Other outreach events and workshops.

Meetings and relationship building. In an effort to engage its stakeholders, WSDOT meets regularly with a wide range of stakeholder groups including construction and engineering trade associations as well as with small business and DBE representatives.

Trade association collaborations. WSDOT hosts stakeholder meetings with major construction and engineering trade associations including the Association of General Contractors and the

American Council of Engineering Companies. WSDOT meets with those organizations and partners with them to form committees to address issues and concerns of common interest. WSDOT also has a joint task force that works with both organizations together to help develop Washington's Design-Build program, for which WSDOT provides insights and makes recommendations regarding design-build policy.

DBE Advisory Group. WSDOT formed a DBE Advisory Group in July 2011 to seek guidance and input on the DBE program from vested stakeholders. The group provides WSDOT with direct insight into how the DBE program affects the contracting community, including both prime contractors and subcontractors. The group is made up of WSDOT employees and external DBE stakeholders, including representatives of community and trade-based organizations and of local businesses. The DBE Advisory Group meets on a quarterly basis.

Website and communications. WSDOT revises and updates the Office of Equal Opportunity (OEO) website regularly. The website currently provides access to various business resources including links to the following information:

- DBE certification database (through the Washington State Office of Minority and Women's Business Enterprises);
- Certification instructions and application;
- Supportive services programs and resources;
- Technical assistance programs and resources; and
- Links to contracting opportunities throughout Washington and contracting opportunities that are reserved for small businesses.

Advertisements of contract opportunities. In addition to accessing OEO or small business portal websites, there are several other ways for small businesses, including many MBE/WBEs, to find out about contracting opportunities with WSDOT.

Daily Journal of Commerce. WSDOT advertises all of its contract opportunities in the Daily Journal of Commerce, a Seattle-based newspaper read by professionals in construction, engineering, and architecture. The Daily Journal of Commerce is published on weekdays.

Weekly e-mail blasts. WSDOT sends out e-mail blasts to highway DBE contractors on a weekly basis to inform them of new contracts. DBE and all other registered contractors also receive a hard copy of the information through the mail.

Washington's Electronic Business Solution (WEBS). WSDOT posts information about contract opportunities online and also distributes that information to contractors that are registered through WEBS. Contractors register for the work areas in which they are interested, and WEBS alerts them automatically when contracts in those fields become available.

Other outreach events and workshops. WSDOT participates in a number of outreach events and workshops, some of which are organized by WSDOT headquarters and others by WSDOT local district offices.

Roundtables. WSDOT recently held roundtables with prime contractors and subcontractors to address topics related to helping DBEs work on WSDOT contracts. The roundtables provided information and a forum to discuss contractors' ideas and concerns about DBE goals, barriers to participation, DBE support services, USDOT's bonding assistance program, upcoming WSDOT projects, DBE certification, and other topics.

Networking opportunities. WSDOT helps to host several networking events and opportunities for businesses interested in working with government agencies. Some examples include the Regional Contracting Forum, the Alliance Northwest Conference, and Business After Hours. The Regional Contracting Forum allows businesses to network with WSDOT staff and with other businesses. The Alliance Northwest Conference provides businesses with a day of networking with federal agencies and procurement training. Business After Hours is an annual award and networking event for all WSDOT bidders.

Mandatory pre-bid conferences. WSDOT does not require pre-bid conferences for all contracts, but when the agency does require them, they are mandatory for all bidders. Pre-bid conferences provide opportunities for small businesses, including DBEs and many other MBE/WBEs, to network with prime contractors and to express their interest in performing work as subcontractors.

Technical assistance. WSDOT provides technical assistance through partnerships with the Seattle Business Assistance Center (SBAC), an organization that works to help create, sustain, and grow entrepreneurial opportunities and livable wage jobs through the provision of financial education and loan capital for low-income individuals, women, minorities, and other disadvantaged populations. In addition, WSDOT works with the Small Business Transportation Resource Center, an organization which offers market research, business training and counseling, referrals, and processing of short-term loans.

Partnership with SBAC. WSDOT contracts with the SBAC to offer one-on-one technical assistance with trained counselors on all aspects of starting and running a small business, including marketing, management, finance, and strategic planning. SBAC also offers financing to qualified small businesses and start-ups through its small business loan program.

Through its contract with SBAC, WSDOT also offers group training throughout the state of Washington in communities such as Spokane, Seattle, Vancouver, Bellingham, Tri-Cities, and Yakima. That training includes classes on:

- DBE certification processes;
- Understanding WSDOT projects;
- Bidding and estimating;
- Prompt payment and retainage, including liens;
- Finance and accounting;
- Scheduling;
- Project management;
- Bonding and insurance;

- WSDOT's DBE program responsibilities and requirements; and
- Documentation and record keeping.

Business and financial management. WSDOT provides free technical assistance in the areas of estimating and bidding, record keeping, business management, and financial accounting.

Class and program enrollment. WSDOT offers DBEs aid related to enrolling in business development programs and business-related courses.

Improved contracting practices. WSDOT is taking part in an effort to reform procurement processes in Washington State to increase small business participation. Washington examines such efforts periodically but has put few initiatives into place.

- Many business owners and managers that the study team interviewed as part of the disparity study noted that public sector procurement processes were overly cumbersome and complex and recommended simplification. Many interviewees also commented that the typical size of WSDOT contracts precludes many small businesses, including many MBE/WBEs, from bidding on that work.
- As discussed in Appendix J, some interviewees had favorable comments concerning WSDOT's efforts to simplify bid processes, add outreach opportunities, and effectively explain processes to potential bidders. Some interviewees were unaware of those efforts or did not find them to be useful.

WSDOT should review those comments and other information it may have when determining further improvements to its bid processes. WSDOT may also need to expand avenues to communicate its bid processes to potential prime contractors and subcontractors. For example, many businesses participating in interviews were not aware of the features on WSDOT's website.

Data collection, monitoring, and reporting. WSDOT reported that it would like to find a way to improve the quality of the quarterly affidavits it receives from prime contractors regarding payments and subcontractor utilization. WSDOT would also like to improve the quality of reports that it makes to FHWA.

Potential race- and gender-neutral measures. In addition to the race- and gender-neutral measures that WSDOT currently has in place, there are several race- and gender-neutral measures that WSDOT is planning or has in development. Figure 10-7 presents some of those measures.

Figure 10-7.
Race- and gender-neutral measures that WSDOT is planning or has in development

Potential measures				
Require prime contractors on design-build contracts to indicate how much they can subcontract to small businesses, how they will include businesses of all sizes, and how they will structure bidding to allow small businesses to compete	Issue small business certifications similar to the DBE program without consideration to gender or ethnicity. Businesses will be required to be 51 percent or more owned by an economically disadvantaged individual and a small business concern Continue to monitor whether there are enough contracts on which small businesses can bid			
Implement requirements for the Limited Public Works				
program that at least three micro-small business enterprises must be solicited for bid opportunities	Waive the payment and performance bond required by RCW 39.04.155 and continue to evaluate the impact of that action			
Implement voluntary small business goals of 10 percent on USDOT-funded projects without established DBE goals	57.04.155 and continue to evaluate the impact of that action			
Develop a Data Management System to capture all business	Require contractors on USDOT-funded projects without DBE goals to show how they will work to include small businesses			
contracting activities				

Source: Washington Department of Transportation Office of Equal Opportunity, 2012.

There are also several organizations throughout Washington that are implementing similar efforts to encourage the participation of small businesses — including DBEs and many MBE/WBEs — in local contracting. WSDOT might consider adopting some of those measures to encourage small business and DBE participation in its transportation contracts. Figure 10-8 provides examples of race- and gender-neutral programs that other organizations in Washington have in place. There may be several reasons why certain measures are not practicable for WSDOT, and there may also be measures in addition to those presented in Figure 10-8 that WSDOT might consider using.

Figure 10-8. Examples of race- and gender-neutral programs that Washington organizations have in place

Neutral remedies	
Technical assistance	Technical assistance programs are available throughout Washington. Those programs primarily provide general information and assistance for business start-ups and growing businesses. Industry-specific resources often take the form of checklists of issues of which businesses should be aware and easily accessible business forms. Examples of general support providers include SCORE, Washington State Network Small Business Development Centers, and the Washington State Small Business Administration. Some large organizations that offer trade-specific classes and seminars are the Associated General Contractors and the American Council of Engineering Companies. Other programs focus on market development assistance and the use of electronic media and technology. Those programs are available through organizations such as The Foundation for the Advancement of Marketing Excellence in Entrepreneurs. More locally focused programs include the Business Development Center at UW Bothell, INROADS in Seattle and Northern Idaho, the Seattle Community Capital Development, and the Yakima County Development Association.
Small business finance	Washington State offers a program called the Linked Deposit Program which links the deposit of state funds to loans made by participating financial institutions to qualified MBE/WBEs. The deposit of the state funds is made at below market rates, and the savings are passed on by the bank to the Linked Deposit borrowers in the form of an interest rate not to exceed 2 percent.
	Other organizations providing financing or aid in finding financing in Washington include Community Capital Development, which provides both loans and training and technical assistance; the Rural Washington Loan Fund, which provides loans to businesses that would create jobs or help retain existing jobs in specific areas, especially for low income persons; the Coastal Revolving Loan Fund/Technical Assistance Loan Fund, which provides loans to businesses that would create jobs in regions affected by declines in fishing and timber industries; Evergreen Community Development; and organizations such as ACCION USA. Other local organizations, including minority and regional chambers, provide training and support on how to obtain financing and prepare funding documents.
Bonding programs	Bonding programs offering bonding and finance assistance and training have become more popular. Programs such as the SBA Bond Guarantee Program provide 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 and is a major bonding source for Washington DBE firms.
	The Washington Economic Development Finance Authority offers resources bonds and information for obtaining bond financing in Washington, particularly for smaller manufacturing and processing facilities and environmental preservation, energy, technology, and applied biological sciences as they overlap with waste disposal.
Mentor-protégé programs	The City of Tacoma's Historically Underutilized Business Program (HUB) offers a mentor-protégé program that connects HUB-certified businesses with a successful business owner mentor.
	Community Capital Development and the City of Shoreline, through their contracts with Shoreline Community College Small Business Accelerator, both provide free business mentoring.
	The Small Business Administration 8(a) Business Development Mentor-Protégé Program is an example of a mentor-protégé program that pairs subcontractors with prime contractors to assist in management, financial, and technical assistance and exploration of joint ventures and subcontractor opportunities for federal contracts.

Source: BBC Research & Consulting.

CHAPTER 11. WSDOT's Implementation of the Federal DBE Program

Chapter 11 reviews information relevant to the Washington State Department of Transportation's (WSDOT's) implementation of specific components of the Federal Disadvantaged Business Enterprise (DBE) Program. Chapter 11 includes discussion of program measures for United States Department of Transportation (USDOT)- and state-funded contracts. Regulations presented in 49 Code of Federal Regulations (CFR) Part 26 and associated documents offer state and local agencies guidance related to implementing the Federal DBE Program. Key requirements of the program are described below in the order that they are presented in 49 CFR Part 26.1

Reporting to DOT — 49 CFR Part 26.11 (b)

WSDOT must periodically report DBE participation in its transportation-related construction and engineering contracts to the Federal Highway Administration (FHWA). BBC's review of WSDOT's contracting data indicated that the agency requires prime contractors to submit information detailing the utilization of DBEs at the end of each FHWA-funded project. WSDOT should consider continuing to do so and modifying its reporting process to ensure that all DBE utilization is captured regardless of whether a prime contractor is using the DBE participation to satisfy a contract goal. In addition, WSDOT should continue to capture complete information about DBE participation on FHWA-funded contracts that subrecipient local agencies award through Local Programs.

Bidders List — 49 CFR Part 26.11 (c)

As part of its implementation of the Federal DBE Program, WSDOT must develop a bidders list of businesses that are available for its transportation contracts. The bidders list must include the following information about each available business:

- Name;
- Address;
- DBE status:
- Age of business; and
- Annual gross receipts.

WSDOT currently maintains a bidders list that includes all of the above information.

¹ Because only certain portions of the Federal DBE Program are discussed in Chapter 11, WSDOT should refer to the complete federal regulations when considering its implementation of the program.

Use of 2012 availability interview information. Availability interviews that the study team conducted as part of the disparity study collected information about local businesses that are potentially available for different types of WSDOT construction and engineering prime contracts and subcontracts. WSDOT should consider using the availability interview database to supplement its current bidders list.

Further development and communication of the Washington State Office of Minority and Women's Business Enterprises (OMWBE) Directory of Certified Firms and Washington's Electronic Business Solution (WEBS). OMWBE offers a database on its website of all DBE-certified businesses, searchable by business name, business description, SIC code, and NAICS code. Utilizing that database could help bidders locate qualified DBEs. In addition, the Washington State Department of Enterprise Services offers WEBS, which allows businesses to sign up to receive notifications of bidding opportunities. WEBS could help DBEs find contracts on which they might be interested in bidding as either a subcontractor or as a prime contractor.

Qualitative information that the study team collected as part of in-depth anecdotal interviews and public meetings indicated that many business owners are aware of the DBE Directory and electronic notification of bid opportunities but many are not. WSDOT might consider linking the two services, so that when businesses are notified of a contract in which they might be interested, they are also notified of qualified DBEs who might be interested in participating in the contract as subcontractors. WSDOT should consider further developing web-based communication opportunities between prime contractors and subcontractors and further invest in publicizing those opportunities.

Further dissemination of information concerning bid and proposal awards. WSDOT might consider more efforts to publicize post-award bidder/proposer information on its website. Qualitative information from in-depth interviews and public meetings indicated that such a system would be helpful to prime contractors and consultants in addition to subcontractors participating in those bids.

Maintaining comprehensive vendor data. In order to effectively track the utilization of MBE/WBEs on transportation contracts, WSDOT should consider continuing to improve the information that it collects on the ownership status of utilized businesses, including both prime contractors and subcontractors. Not only should WSDOT consider collecting information about DBE status, but it should also consider obtaining information on the race/ethnicity and gender of business owners, regardless of certification status. In addition, WSDOT should consider collecting information that will allow it to better distinguish between Asian-Pacific American-owned businesses and Subcontinent Asian American-owned businesses. WSDOT can use business information that BBC collected as part of the 2012 disparity study to update and improve its vendor data.

Prompt Payment Mechanisms — 49 CFR Part 26.29

WSDOT's prompt payment requirements for construction and engineering contracts appear to comply with Washington State law and with 49 CFR Part 26.29. WSDOT is required to make progress payments to prime contractors within 30 days of receiving an invoice. In addition,

WSDOT must pay 1 percent interest on a monthly basis on all payments that it does not issue within 30 days of an invoice. Prime contractors are then required to pay subcontractors no later than 10 days after receipt of each progress payment.

In-depth anecdotal interviews with business owners and managers revealed some dissatisfaction with how promptly businesses are paid on WSDOT projects. Most prompt payment issues fell into one of the following categories:

- Some business owners described instances in which WSDOT processes were the cause of the slow payment. For example, one business owner indicated that two and a half months passed between submitting her invoice as a subcontractor and payment by WSDOT. (She reported that the prime contractor paid her immediately after receiving WSDOT payment.)
- Some owners of businesses that work as subcontractors on WSDOT projects indicated that WSDOT retainage policies put their businesses at a disadvantage. One business owner reported that WSDOT policies allow prime contractors to hold 5 percent retainage on any subcontracts for the life of the entire contract, even if that work is satisfactorily completed at the beginning of a project.
- A number of business owners said that prime contractors working on WSDOT contracts do not consistently pay them within 10 days of receiving a WSDOT progress payment, and that they do not have an easy way to find out whether WSDOT has paid the prime contractor. Some business owners indicated that prime contractors will blame WSDOT even when WSDOT has already made payments to the primes. Some interviewees reported that WSDOT was not helpful when they called the agency to report such problems.

Other business owners had favorable comments about timely payment on WSDOT projects.

WSDOT might consider implementing a broader compliance review to ensure that WSDOT divisions, local agencies, and prime contractors follow its prompt payment policies, particularly as they relate to the requirement that prime contractors pay subcontractors no later than 10 days after receipt of payment. More extensive compliance review and more communication about WSDOT's policies to the contracting community might also be beneficial.

DBE Directory — 49 CFR Part 26.31

WSDOT currently maintains a directory of DBEs that are certified through OMWBE on the Office of Equal Opportunity website.² However, there is some concern that OMWBE may not be correctly updating the directory due to insufficient staffing.

Overconcentration — 49 CFR Part 26.33

Agencies implementing the Federal DBE Program are required to report and take corrective measures if they find that DBEs are so overconcentrated in certain work areas as to unduly burden non-DBEs working in those areas. BBC investigated potential overconcentration on WSDOT contracts. There were three subindustries in which certified DBEs accounted for 50

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² http://www.wsdot.wa.gov/EqualOpportunity/DBEDirectory.htm

percent or more of total subcontract dollars for federal fiscal years (FFYs) 2009 through 2011, based on contract data that the study team received from WSDOT and local agencies:

- Traffic control and flagging services (63%);
- Construction management (58%); and
- Landscaping and erosion control (51%).

Because the above figures are based only on subcontract dollars, they do not include work that prime contractors self-performed in those areas. If the study team had included self-performed work in those analyses, the percentages for which DBEs accounted would likely have decreased.

WSDOT conducted its own analysis of overconcentration in street sweeping in response to receiving a complaint of DBE overconcentration from a local non-Hispanic white male-owned (i.e., majority-owned) street sweeping business. After conducting several quantitative analyses related to subcontracting opportunities and DBE utilization on street sweeping contracts, WSDOT concluded that overconcentration does not exist in the Washington street sweeping industry. Based on its own analyses, BBC found that DBEs accounted for 61 percent of street sweeping subcontract dollars for FFYs 2009 through 2011. It is important to note that BBC's analyses differed from WSDOT's in many important ways. For example, WSDOT considered only FHWA-funded contracts and may have defined street sweeping contracts differently than BBC did. Such differences may have accounted for the different results.³

WSDOT should consider reviewing similar information and continuing to monitor traffic control and flagging services; construction management; landscaping and erosion control; street sweeping services; and other work specializations for potential overconcentration in the future.

Business Development Programs — 49 CFR Part 26.35 and Mentorprotégé Programs – 49 CFR Appendix D to Part 26

Business development programs (BDPs) are programs that are designed to assist DBE-certified businesses in developing the capabilities to compete for work independent of the DBE Program. As part of a BDP, or separately, agencies may establish a mentor-protégé program, in which a non-DBE or another DBE serves as a mentor and principal source of business development assistance to a protégé DBE.

As part of its BDP, WSDOT currently offers DBEs technical assistance in the areas of:

- Estimating and bidding;
- Record keeping;
- Business management; and
- Financial accounting.

³ In the disparity study, street sweeping was included as part of the "other construction" subindustry. Because street sweeping did not make up its own subindustry, BBC did not analyze it separately as part of its original overconcentration analysis.

The agency also offers DBEs the opportunity to enroll in other business-related courses. WSDOT does not currently offer any mentor-protégé programs for DBEs.

Some of the business owners that the study team interviewed as part of the disparity study indicated that they had received technical assistance or enrolled in technical assistance courses that WSDOT sponsored, and that those courses were helpful. Some business owners cautioned that high-quality training programs specific to their fields were needed and that generalized or low-quality training could cause more harm than good.

Many business owners and managers thought that mentor-protégé programs would be very useful. Some interviewees were critical of how such programs were structured, indicating shortages of mentors and lack of mentor commitment as potential issues. WSDOT might explore additional partnerships to implement other BDPs, including implementing a mentor-protégé program. Such programs would provide specialized assistance that would be tailored to the needs of developing businesses.

Responsibilities for Monitoring the Performance of Other Program Participants — 49 CFR Part 26.37

The Final Rule effective February 28, 2011 revised requirements for monitoring and enforcing that the work that prime contractors commit to DBE subcontractors at contract award (or through contract modifications) is actually performed by those DBEs. USDOT describes the requirements in 49 CFR Part 26.37(b). The Final Rule states that prime contractors can only terminate DBEs for "good cause" and with written consent from the awarding agency. WSDOT reported that it has no mechanism in place to regularly verify that prime contractors actually utilize DBEs to the degree to which they committed to doing so at contract award. Such issues of underutilization only come to WSDOT's attention when there are complaints from DBE subcontractors, at which point WSDOT initiates an investigation, and if necessary, takes action.

Regarding monitoring the performance of DBEs, WSDOT regulations state that the work that DBEs complete must fulfill commercially useful functions (CUFs) in order to count towards DBE goals. The Certified Acceptance Agency must conduct an on-site review for every utilized DBE subcontractor, regardless of whether its utilization is counting toward a specific DBE goal to ensure that the DBE is fulfilling a CUF. WSDOT should consider carefully reviewing the requirements set forth in 49 CFR Part 26.37(b) and in the Final Rule to ensure that its monitoring and enforcement mechanisms are consistent with federal regulations.

Fostering Small Business Participation — 49 CFR Part 26.39

When implementing the Federal DBE Program, WSDOT must include a measure to structure contracting requirements to facilitate competition by small businesses, "taking all reasonable steps to eliminate obstacles to their participation, including unnecessary and unjustified bundling of contract requirements that may preclude small business participation in procurements as prime contractors or subcontractors." The Final Rule effective February 28, 2011 added a requirement for transportation agencies to foster small business participation in

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⁴ 49 CFR Part 26.39(a).

their contracting. It required agencies to submit a plan for fostering small business participation to USDOT in early 2012. WSDOT submitted a small business participation plan to USDOT in early 2012, and USDOT approved the plan on July 13, 2012.

Unbundling contracts. As presented in Appendix J, business owners identified the size of contracts as a substantial barrier to small business participation in public sector contracts. Owners of both engineering and construction businesses strongly urged WSDOT to further unbundle contracts and create smaller contract opportunities. Based on its own quantitative analyses of contract sizes in FFYs 2009 through 2011, WSDOT concluded that it was unnecessary to unbundle contracts any further to make them more accessible to small businesses.

Contracting opportunities on engineering contracts. Some business owners and trade association representatives indicated that WSDOT self-performs a disproportionately large percentage of engineering work, limiting the contracting opportunities that are available to local engineering businesses. In addition, BBC's case study analysis of engineering proposals suggested that WSDOT may sole-source a relatively large proportion of engineering contracts (for details, see Chapter 8). WSDOT might consider exploring ways that it could contract out more engineering work and sole-source fewer engineering contracts to help foster small business contracting opportunities.

Additional strategies. USDOT also identifies the following potential strategies for fostering small business participation:

- Establishing a race- and gender-neutral small business set-aside for prime contracts under a stated amount (e.g., \$1 million);
- For multi-year design-build contracts or other large contracts (e.g., "megaprojects"), requiring bidders on the prime contract to specify elements of the contract — or provide subcontracting opportunities — that are of a size that small businesses, including DBEs, can reasonably perform;
- On prime contracts that do not include DBE contract goals, requiring the prime contractor to provide subcontracting opportunities of a size that small businesses, including DBEs, can reasonably perform;
- Identifying alternative acquisition strategies and structuring procurements to facilitate the ability of consortia or joint ventures consisting of small businesses, including DBEs, to compete for and perform prime contracts; and
- Ensuring that a reasonable number of prime contracts are of a size that small businesses, including DBEs, can reasonably perform.

Chapter 10 of the report outlines many of WSDOT's current and planned race- and genderneutral measures and provides examples of neutral measures that other organizations in Washington have implemented. WSDOT should review that information and consider implementing measures that the agency deems would be effective. WSDOT should also review legal and budgetary issues in considering different measures.

Prohibition of DBE Quotas and Prohibition of Set-asides for DBEs Unless in Limited and Extreme Circumstances — 49 CFR Part 26.43

DBE quotas are prohibited under the Federal DBE Program. DBE set-asides are only to be used in extreme circumstances. The Federal DBE Program does allow for the implementation of a small business program for small businesses that are bidding or proposing as prime contractors. WSDOT offers a "small works roster" that limits bidding on contracts under \$35,000 to businesses with annual gross revenues of less than \$1 million. To ensure that businesses are legitimately of that size, they must be certified as a small business with OMWBE. WSDOT currently does not use quotas in any way in its administration of the Federal DBE Program.

Setting Overall Annual DBE Goals — 49 CFR Part 26.45

In the Final Rule effective February 28, 2011, USDOT changed how often agencies that implement the Federal DBE Program are required to submit overall annual DBE goals. As discussed in Chapter 1, agencies such as WSDOT now need to develop and submit overall DBE goals every three years. That change was effective as of March 5, 2010. Chapter 9 uses data and results from the disparity study to provide WSDOT with information that could be useful in developing its next overall DBE goal submission.

Analysis of Reasons for not Meeting Overall DBE Goal — 49 CFR Part 26.47(c)

Another addition to the Federal DBE Program made under the Final Rule effective February 28, 2011 requires agencies to take the following actions if their DBE participation for a particular fiscal year is less than their overall goals for that year:

- Analyze in detail the reasons for the difference; and
- Establish specific steps and milestones to address the difference and enable the agency to meet the goal in the next fiscal year.

Need for separate accounting for participation of potential DBEs. In accordance with guidance in the Federal DBE Program, BBC's analysis of the overall DBE goal in this study is based on MBE/WBEs that are currently DBE-certified and on MBE/WBEs that could *potentially* be DBE-certified (i.e., potential DBEs). One of the reasons that WSDOT has not met its overall DBE goal in past years, and might not meet it in the future, is that its measurement of DBE participation only includes businesses that are DBE-certified. Uncertified MBE/WBEs that were utilized on WSDOT work during the study period or that are potentially available for WSDOT work are counted in the overall DBE goal but are not counted in the participation reports that are used to measure whether WSDOT has met the overall DBE goal.

Based on verbal communication with USDOT in Washington, D.C. in 2011, agencies can explore whether one reason why they have not met their overall DBE goal is because they are not counting the participation of uncertified MBE/WBEs that could be DBE-certified. USDOT might then expect an agency to explore ways to further encourage potential DBEs to become DBE-

certified as one way of closing the gap between reported DBE participation and its overall DBE goal. In order to have the information to explore that possibility, WSDOT should consider:

- Developing a system to collect information on the race/ethnicity and gender of the owners of all businesses — not just certified DBEs — participating as prime contractors or subcontractors, for both WSDOT and Local Programs contracts;
- Developing internal participation reports for MBEs and WBEs (by race/ethnicity and gender) and for businesses currently and potentially DBE-certified (based on race/ethnicity and gender of ownership; annual revenue; and other factors such as whether the business has been denied DBE certification in the past), for both WSDOT and Local Programs contracts; and
- Continuing to track participation of certified DBEs on FHWA-funded WSDOT and Local Programs contracts, per USDOT reporting requirements.

Other steps to evaluate how WSDOT might better meet the overall DBE goal.

Analyzing the utilization of uncertified MBE/WBEs that could be certified is one step among many that WSDOT might consider taking when examining any differences between DBE utilization and its overall DBE goal. Based on its comprehensive review, WSDOT must establish specific steps and milestones to correct the problems it identifies in its analysis and to enable it to better meet its overall DBE goal in the future, per 49 CFR Part 26.47(c)(2).

Maximum Feasible Portion of Goal Met through Neutral Programs — 49 CFR Part 26.51(a)

As discussed in Chapter 10, WSDOT must meet the maximum feasible portion of its overall DBE goal through the use of race- and gender-neutral means of facilitating DBE participation. WSDOT must project the portion of its overall DBE goal that could be achieved through such means. The agency should consider the information and analytical approaches presented in Chapter 10 when making such projections.

Use of DBE Contract Goals—49 CFR Part 26.51(d)

The Federal DBE Program requires agencies to establish contract-specific DBE goals to meet any portion of their overall DBE goals that they do not project being able to meet using race- and gender-neutral means, as noted in 49 CFR Part 26.51(d). WSDOT should assess whether the use of DBE contract goals is necessary to meet any portion of its overall DBE goal, based on information from the disparity study and other available information.

USDOT guidance on DBE contract goals. USDOT guidelines on the use of DBE contract goals, which are presented in 49 CFR Part 26.51(e), include the following guidance:

- 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 the agency projects being unable to meet through race- and gender-neutral means;

- An agency's contract goals must provide for participation by all DBE groups eligible for race- and gender-conscious measures and must not be subdivided into group-specific goals; and
- An agency must maintain and report data on DBE utilization separately for contracts that include and that do not include DBE goals.

If WSDOT determines that it needs to continue the use of DBE contract goals, then it should also evaluate which DBE groups should be considered eligible to participate in any goals that may apply to FHWA-funded contracts (or other USDOT-funded contracts). If WSDOT decides to include specific DBE groups (e.g., groups classified as underutilized DBEs) but not other groups in a contract goals program, it must submit a waiver request to FHWA.

Use of good faith efforts. WSDOT requires contractors to submit good faith efforts documentation and written confirmation within 48 hours of bid opening in the event that bidders' efforts to solicit sufficient DBE participation were unsuccessful. Very few bidders submit good faith efforts documentation instead of meeting DBE goals. During the study period, WSDOT only awarded one contract to a bidder that submitted good faith efforts rather than meeting DBE goals.

Some individuals participating in in-depth interviews, public hearings, and public meetings suggested that WSDOT should explore new ways of implementing the Federal DBE Program that better achieve the objective of further developing MBEs and WBEs. They reported that DBE contract goals and the good faith efforts process encourage extensive efforts on the part of prime contractors to document that they have contacted DBEs about subcontracting opportunities, but that the nature of the bidding process makes it difficult to ensure meaningful and substantial participation of DBEs on those contracts. Issues that participants identified include the following:

- Challenges related to unbundling subcontract elements ahead of time into sizes suitable for DBEs;
- Difficulties meeting DBE contract goals that some prime contractors reported are too high given the work involved in the project and the location within the state;
- Difficulties associated with obtaining quotes from DBEs and fitting DBEs into bid submissions in the final minutes before a bid deadline:
- Tendencies of prime contractors to look to DBEs for portions of the project that are easily separated in overall bid packages (e.g., trucking);
- Allegations that prime contractors often use front companies to meet DBE contract goals;
 and
- Challenges associated with choosing a DBE subcontractor for a portion of a project when the firm is not the low bidder in a highly price-competitive environment.

Comments about the Federal DBE Program included the following examples:

- Several participants indicated that the current DBE contract goals program produces an
 incentive for prime contractors to use perfunctory good faith efforts processes to comply
 with the program rather than to seek meaningful participation of DBEs on a project.
- Many owners and managers of DBEs reported that prime contractors call their businesses just to "check a box" with no interest in actually using their companies on projects.
- Some owners of smaller DBE-certified businesses said that new certification size standards are allowing large DBEs to remain in the program, which adversely affected their small businesses. They urged WSDOT to consider steps to limit the program to "true" small businesses.
- Some business owners reported that only a few DBEs get most of the work at the expense of smaller DBEs.
- Some interviewees reported that front companies have been a large barrier to legitimate DBEs.
- Some representatives of majority-owned businesses and non-certified MBE/WBEs said that WSDOT should eliminate the use of DBE contract goals. Some said that WSDOT should consider small business goals or other race- and gender-neutral efforts instead of DBE contract goals.
- Some owners and managers of majority-owned businesses said that DBE contract goals made it very difficult for their businesses to obtain WSDOT subcontracts.

WSDOT might review such concerns further when evaluating ways to improve its current implementation of the Federal DBE Program. It should review legal issues, including state contracting laws and whether certain program options would meet USDOT regulations.

Flexible Use of any Race- and Gender-conscious Measures — 49 CFR Part 26.51(f)

State and local agencies must exercise flexibility in any use of race- and gender-conscious measures such as DBE contract goals. For example, if WSDOT determines that its DBE utilization is exceeding its overall DBE goal in a particular fiscal year, it must reduce its use of contract-specific DBE goals to the extent necessary. If it determines that it will fall short of the overall DBE goal in a particular fiscal year, then it must make appropriate modifications in the use of race- and gender-neutral and race- and gender-conscious measures to allow it to meet the overall goal. If, after implementation of any additional neutral measures, WSDOT observes improvements in its utilization of certain racial/ethnic and gender groups on contracts that do not include DBE goals (in comparison to the availability of those groups on such contracts), it might consider changing its projection of how much of its overall DBE goal it can achieve through race- and gender-neutral means in future years.

Good Faith Effort Procedures — 49 CFR Part 26.53

USDOT has provided guidance for agencies to review good faith efforts, including materials in Appendix A of 49 CFR Part 26. WSDOT's current implementation of the Federal DBE Program outlines the good faith efforts process that it uses for DBE contract goals. The Final Rule effective February 28, 2011 updated requirements for good faith efforts when agencies use DBE contract goals. WSDOT should review 49 CFR Part 26.53 and the Final Rule to ensure that its good faith efforts procedures are consistent with federal regulations.

Counting DBE and MBE/WBE Participation — 49 CFR Part 26.55

Section 26.55 of 49 CFR describes how agencies should count DBE participation and evaluate whether bidders have met DBE contract goals. Federal regulations also give specific guidance for counting the participation of different types of DBE suppliers and trucking companies. Section 26.11 discusses the Uniform Report of DBE Awards or Commitments and Payments.

As discussed above, BBC recommends that WSDOT should consider developing procedures and databases to consistently track participation of MBE/WBEs and potential DBEs in FHWA- and state-funded contracts that WSDOT and local agencies award. Such measures will help WSDOT track the effectiveness of race- and gender-neutral programs in encouraging MBE/WBE and DBE participation. If applicable, WSDOT should also consider collecting important information regarding any shortfalls in annual DBE participation, including preparing utilization reports for all MBE/WBEs (and not just those that are DBE-certified). WSDOT should consider collecting and using the following information:

- Databases that BBC developed as part of the study to track MBE/WBE utilization;
- Contractor/consultant registration documents from businesses working with WSDOT as prime contractors or subcontractors, which should include information about the race/ethnicity and gender of their owners;
- Prime contractor and subcontractor utilization on both FHWA- and state-funded contracts;
- Reports on the participation of certified DBEs in FHWA-funded contracts, as required under the Federal DBE Program;
- Subcontractor utilization data (for all tiers and suppliers) for all businesses regardless of race/ethnicity, gender, and DBE-certification status;
- Invoices for prime contractors and subcontractors;
- Descriptions of the areas of the contract on which subcontractors worked; and
- Subcontractors' contact information and committed dollar amounts from prime contractors at the time of contract award.

WSDOT should also consider establishing a training process for all staff that is responsible for managing and entering contract and vendor data. Training should convey data entry rules and standards, and ensure consistency in the data entry process.

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⁵ WSDOT might consider including the utilization of self-identified MBE/WBEs in such utilization reports.

DBE certification — 49 CFR Part 26 Subpart D

OMWBE is responsible for all DBE (as well as MBE/WBE) certification in the state of Washington. OMWBE also maintains all of the certification records for the state of Washington. Businesses interested in working with WSDOT that are seeking DBE certification must obtain it through OMWBE. OMWBE is designed to comply with 49 CFR Part 26 Subpart D. As WSDOT continues to work with DBE-certified businesses, the agency should consider ensuring that OMWBE continues to certify all groups that the Federal DBE Program presumes to be socially and economically disadvantage in a manner that is consistent with federal regulations.

Many businesses participating in in-depth interviews, public meetings, and public hearings commented on the DBE certification process. Although some business owners gave favorable comments about the OMWBE certification process, several business owners were highly critical about the difficulties and time requirements associated with certification. Some interviewees also said that OMWBE is unfair in its treatment of WBEs seeking DBE certification.

- It appears that many businesses and local agencies are confused about the multiple Small Business Enterprise, MBE, WBE, and DBE programs that Washington agencies operate.
- Representatives of some MBE/WBEs reported that they were not DBE-certified because they perceived the process to be difficult or that there would be little benefit from certification.
- Some business owners reported that they inquired about certification and were dissuaded after learning about the time and effort required, or about the difficulties for WBEs to be certified when family members were also involved in the business.

Appendix J provides other perceptions of business owners that have considered DBE certification or that have gone through the certification process.

WSDOT is currently working with OMWBE to develop measures that will further encourage MBE/WBEs that are not DBE-certified to become certified. WSDOT might consider more effectively communicating information about the Federal DBE Program, particularly information about the benefits of DBE certification. It may be effective for WSDOT to coordinate with local agencies that operate similar programs and to verify that the information that OMWBE provides is accurate and current. WSDOT should consider encouraging OMWBE to examine its staffing, training, and information systems to improve its implementation of the DBE certification process as well as other aspects of the Federal DBE Program.

Although WSDOT appears to follow federal regulations concerning DBE certification, which requires collecting and reviewing considerable information from program applicants, the agency might research other ways to make the certification process easier for potential DBEs. WSDOT already maintains historic data on DBE certification. Those data could allow WSDOT to analyze chronological trends in certification and learn more about DBE turnover.

Monitoring Changes to the Federal DBE Program

Federal regulations related to the Federal DBE Program change periodically, and USDOT also issues new guidance concerning implementation of the program. WSDOT should continue to monitor such developments. Other transportation agencies' implementations of the Federal DBE Program are under review in federal district courts. WSDOT should continue to monitor court decisions in those and other relevant cases.

WSDOT's State-funded Contracts

Certain improvements to WSDOT's implementation of the Federal DBE Program, especially concerning contract goals and tracking MBE/WBE participation, might also be implemented on a race- and gender-neutral basis for WSDOT and local agency contracts that are entirely state-funded. WSDOT should review the opportunities on its state-funded contracts to further encourage participation of small businesses, including many MBE/WBEs, as allowable under state law.

APPENDIX A. Definitions of Terms

Appendix A provides explanations and definitions useful to understanding the Washington State Department of Transportation (WSDOT) disparity study report. The following definitions are only relevant in the context of this report.

Anecdotal evidence. Anecdotal evidence includes personal accounts and perceptions of incidents — including any incidents of discrimination — told from individual interviewees' or participants' perspectives.

Availability analysis. The availability analysis examines the number of minority- and womenowned businesses ready, willing, and able to perform transportation-related construction and engineering work for WSDOT or subrecipient local agencies.

Business. A business is a for-profit company, including all of its establishments (synonymous with "firm").

Business listing. A business listing is a record in the Dun & Bradstreet database (or other database) of business information. A Dun & Bradstreet record is considered a "listing" until the study team determines the listing to actually represent a business establishment with a working phone number.

Business establishment. A business establishment (or simply, "establishment") is a place of business with an address and working phone number. One business can have many business establishments.

Certified minority-owned business enterprise (certified MBE). A certified MBE is a business that is certified by the Washington State Office of Minority and Women's Business Enterprises (OMWBE) as being a business with at least 51 percent ownership and control by minorities. Minority groups are defined according to federal regulations, as outlined in 49 Code of Federal Regulations (CFR) Part 26, Section 26.5.

Certified women-owned business enterprise (certified WBE). A certified WBE is a business that is certified by OMWBE as being a business with at least 51 percent ownership and control by women.

Contract. A contract is a legally binding relationship between the seller of goods or services and a buyer.

Contract element. A contract element is either a prime contract or subcontract that the study team included in its analyses.

Contractor. A contractor is a business performing on one or more construction contracts.

Controlled. Control means exercising management and executive authority for a company, per federal regulations, including 49 CFR Part 26, Section 26.71.

Disadvantaged Business Enterprise (DBE). A DBE is a small business owned and controlled by one or more individuals who are both socially and economically disadvantaged according to the guidelines in the Federal DBE Program (49 CFR Part 26) and that is certified as such through OMWBE. Membership in certain race and ethnic groups identified under "minority-owned business enterprise" in this appendix may meet the presumption of socially and economically disadvantaged. Women are also presumed to be socially and economically disadvantaged. Examination of economic disadvantage also includes investigating the gross revenues and the business owner's personal net worth (maximum of \$1.32 million excluding equity in a home and in the business). Some minority- and women-owned businesses do not qualify as DBEs because of gross revenue or net worth requirements. A business owned by a non-minority male can be certified as a DBE if the business meets the requirements in 49 CFR Part 26.

Disparity. A disparity is a difference or gap between an actual outcome and a reference point. For example, a difference between an outcome for one racial/ethnic group and an outcome for non-Hispanic whites may constitute a disparity.

Disparity analysis. A disparity analysis compares actual outcomes with what might be expected based on other data. Analysis of whether there is a "disparity" between the utilization and availability of minority- and women-owned businesses is one tool in examining whether there is evidence consistent with discrimination against such businesses.

Disparity index. A disparity index is computed by dividing percent utilization by percent availability and then multiplying the result by 100. A disparity index of 100 indicates "parity." Smaller disparity indices indicate larger disparities.

Dun & Bradstreet (D&B). D&B is the leading global provider of lists of business establishments and other business information (see www.dnb.com).

Employer firms. Employer firms are firms with paid employees other than the business owner and family members.

Enterprise. An enterprise is an economic unit that could be a for-profit business or business establishment; not-for-profit organization; or public sector organization.

Establishment. See "business establishment."

Federal Disadvantaged Business Enterprise (DBE) Program. The Federal DBE Program was established by the United States Department of Transportation after enactment of the Transportation Equity Act for the 21st Century (TEA-21) as amended in 1998. The regulations promulgated for the Federal DBE Program are set forth in 49 CFR Part 26.

Federal Highway Administration (FHWA). The FHWA is an agency of the United States Department of Transportation that works with state and local governments to construct, preserve, and improve the National Highway System, other roads eligible for federal aid, and certain roads on federal and tribal lands.

Federal Transit Administration (FTA). The FTA is an agency of the United States Department of Transportation that administers federal funding to support local public transportation systems including buses, subways, light rail, passenger ferry boats, and other forms of transportation.

Firm. See "business."

Federally-funded contract. A federally-funded contract is any contract or project funded in whole or in part with United States Department of Transportation (USDOT) financial assistance, including loans. As used in this study, it is synonymous with "USDOT-funded contract."

Industry. An industry is a broad classification for businesses providing related goods or services.

Local agency. A local agency is any local government receiving money through the WSDOT Highways & Local Programs Division. More than 200 municipalities, counties, and regional agencies receive federal and state transportation funding through the WSDOT Highways & Local Programs Division.

Local Programs. WSDOT Local Programs provide financial support for local agency transportation-related construction and engineering contracts. Local agencies let such contracts using funds from the programs. WSDOT retains certain oversight in the use of the funds, which involve USDOT funds. Contracts that are funded through Local Programs are referred to as "Local Programs contracts."

Majority-owned business. A majority-owned business is a for-profit business that is not owned and controlled by minorities or women (see definition of "minorities" below).

MBE. See minority-owned business.

Minorities. Minorities are individuals who belong to one of the racial/ethnic groups identified in the federal regulations in 49 CFR Part 26:

- Black Americans (or "African Americans" in this study), which include persons having origins in any of the black racial groups of Africa;
- Hispanic Americans, which include persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race:
- Native Americans, which include persons who are American Indians, Eskimos, Aleuts or Native Hawaiians:
- Asian-Pacific Americans, which include persons whose origins are from Japan, China, Taiwan, Korea, Burma (Myanmar), Vietnam, Laos, Cambodia (Kampuchea), Thailand, Malaysia, Indonesia, the Philippines, Brunei, Samoa, Guam, Hong Kong, and other countries and territories in the Pacific set forth in 49 CFR Section 26.5; and
- Subcontinent Asian Americans, which include persons whose origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal or Sri Lanka.

Minority-owned business (MBE). A MBE is a business with at least 51 percent ownership and control by minorities. Minority groups are defined according to federal regulations, as outlined in 49 CFR Part 26, Section 26.5. For purposes of this study, a business need not be certified by OMWBE to be counted as a minority-owned business. Businesses owned by minority women are also counted as MBEs in this study (where that information is available).

North American Industry Classification System (NAICS) codes. NAICS codes identify the primary line of business of a business enterprise. For details, see http://www.census.gov/epcd/www/naics.html.

Non-DBEs. Non-DBEs are businesses that are not certified as DBEs, regardless of the race/ethnicity or gender of the owner.

Non-response bias. Non-response bias occurs when the observed responses to a survey question differ in systematic ways from what would have been obtained if all individuals in a population, including non-respondents, had answered the question.

Owned. Owned indicates at least 51 percent ownership of a company. For example, a "minority-owned" business is at least 51 percent owned by one or more minorities.

Potential DBE. A potential DBE is a minority- or women-owned business that is DBE-certified or appears that it could be DBE-certified (regardless of actual DBE certification) based on revenue requirements specified as part of the Federal DBE Program.

Prime consultant. A prime consultant is a professional services firm that performed a prime contract for an end user, such as WSDOT.

Prime contract. A prime contract is a contract between a prime contractor or a prime consultant and the end user, such as WSDOT.

Prime contractor. A prime contractor is a construction firm that performed a prime contract for an end user, such as WSDOT.

Project. A project refers to a construction or engineering endeavor that WSDOT bid out during the study period. A project could include one or multiple prime contracts and corresponding subcontracts.

Race-and gender-conscious measures. Race-and gender-conscious measures are contracting measures that apply to businesses owned by some racial/ethnic groups but not others, or that apply to businesses owned by women but not men. A contract-specific DBE goal is one example of a race- and gender-conscious measure. Note that the term is more accurately "race-, ethnicity-, and gender-conscious measures." However, for ease of communication, the study team has shortened the term to "race- and gender-conscious measures."

Race- and gender-neutral measures. Race and gender-neutral measures apply to businesses, regardless of the race/ethnicity or gender of ownership. Race- and gender-neutral measures may include assistance in overcoming bonding and financing obstacles, simplifying bidding procedures, providing technical assistance, establishing programs to assist start-up

firms, and other methods open to all businesses or any disadvantaged business regardless of race or gender of ownership. (A broader list of examples can be found in 49 CFR Section 26.51(b).) Note that the term is more accurately "race, ethnicity, and gender-neutral measures. However, for ease of communication, the study team has shortened the term to "race- and gender-neutral measures."

Relevant geographic market area. The relevant geographic market area is the geographic area in which the businesses to which WSDOT awards most of its contracting dollars are located. The relevant geographic market area is also referred to as the "local marketplace." Case law related to MBE/WBE programs requires disparity analyses to focus on the "relevant geographic market area."

Remedy. A remedy is a contracting program measure that is designed to address barriers to full participation of a particular group of businesses.

Small business. A small business is a business with low revenues or size (based on revenue or number of employees) relative to other businesses in the industry. "Small business" does not necessarily mean that the business is certified as such.

Small Business Administration (SBA). The SBA refers to the United States Small Business Administration, which is an independent agency of the United States government.

State -funded contract. A state-funded contract is any contract or project that is wholly funded with State of Washington funds. Those contracts do not include USDOT funds.

Statistically significant difference. A statistically significant difference refers to a quantitative difference for which there is a 0.95 probability that chance can be correctly rejected as a reasonable explanation for the difference (meaning that there is a 0.05 probability that chance in the sampling process could correctly account for the difference).

Subconsultant. A subconsultant is a professional services firm that performed services for a prime consultant as part of a larger contract.

Subcontract. A subcontract is a contract between a prime contractor or prime consultant and another business selling goods or services to the prime contractor or prime consultant as part of a larger contract.

Subcontractor. A subcontractor is a construction firm that performed services for a prime contractor as part of a larger project.

Subrecipient. A subrecipient is a local agency receiving financial assistance from USDOT through WSDOT.

Supplier. A supplier is a firm that sold supplies to a prime contractor as part of a larger project.

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¹ <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.

United States Departments of Transportation (USDOT). USDOT refers to the United States Department of Transportation, which includes FHWA and FTA.

Utilization. Utilization refers to the percentage of total contracting dollars of a particular type of work going to a specific group of businesses (e.g., DBEs).

Washington State Department of Transportation (WSDOT). WSDOT is the steward of the State of Washington's transportation system. WSDOT is responsible for building, maintaining, and operating the state highway system. In addition, WSDOT is responsible for the state ferry system and works with various partners to maintain and improve local roads, railroads, airports, and multi-modal alternatives to driving. The department also provides other transportation services such as transportation safety.

Washington State Office of Minority and Women's Business Enterprises (OMWBE). OMWBE is the State of Washington's Unified Certified Authority for DBE certification. OMWBE is responsible for certifying eligible businesses and maintains a statewide electronic directory of certified DBEs in Washington. WSDOT has an Interagency Agreement with OMWBE to provide certification and recertification for eligible businesses interested in participating in USDOT-funded contracts. For details, see http://www.omwbe.wa.gov. OMWBE also has statewide responsibility for certifying businesses as MBEs and WBEs.

WBE. See women-owned business.

Women-owned business (WBE). A WBE is a business with at least 51 percent ownership and control by non-minority women. For this study, businesses owned and controlled by minority women are counted as minority-owned businesses. A business need not be certified by OMWBE as a WBE or DBE to be considered a WBE.

HOLLAND & KNIGHT LLP

APPENDIX B

PRIVILEGED AND CONFIDENTIAL
FINAL DECEMBER 28, 2012
ATTORNEY-CLIENT PRIVILEGE
ATTORNEY WORK PRODUCT
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WORK IN PROGRESS

CONFIDENTIAL DECEMBER 28, 2012 FINAL REPORT

WASHINGTON STATE DOT

REPORT ON LEGAL FRAMEWORK AND ANALYSIS

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APPENDIX B Report on Legal 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 ("MAP-21," "SAFETEA" and "SAFETEA-LU"),¹ and the United States Department of Transportation ("USDOT" or "DOT") regulations promulgated to implement TEA-21 known as the Federal Disadvantaged Business Enterprise ("DBE") Program,² 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 Washington State Department of Transportation ("WSDOT").

This section begins with a review of the landmark United States Supreme Court decision in *City of Richmond v. J.A. Croson.*³ *Croson* 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 *Adarand Constructors, Inc. v. Pena*,⁴ ("*Adarand I*"), which applied the strict scrutiny analysis set forth in *Croson* to federal programs that provide federal assistance to a recipient of federal funds. The Supreme Court's decisions in *Adarand I* and *Croson*, and subsequent cases and authorities provide the basis for the legal analysis in connection with WSDOT's participation in the Federal DBE Program.

The legal framework then analyzes and reviews significant recent court decisions that have followed, interpreted, and applied *Croson* and *Adarand I* to the present and that are applicable to WSDOT's disparity study and the strict scrutiny analysis. In particular, this analysis reviews the Ninth Circuit decision in *Western States Paving Co. v. Washington State DOT*⁵, in which the Ninth Circuit upheld the validity of the Federal DBE Program, but held that mere compliance with the Federal DBE Program by state recipients of federal funds, absent independent and sufficient state-specific evidence of discrimination in the state's transportation contracting industry marketplace, did not satisfy the strict scrutiny analysis. In addition, the analysis reviews the recent federal cases that have considered the validity of the Federal DBE Program and a state government agency's or recipient's implementation of the DBE program, including *Northern Contracting, Inc. v. Illinois DOT*,⁶ *Sherbrooke Turf, Inc. v. Minn DOT and Gross Seed v. Nebraska Department of Roads*,⁷ *Adarand Construction, Inc. v. Slater*⁸ ("Adarand VII"), Geod Corporation v.

¹ Moving Ahead for Progress in the 21st Century Act ("MAP-21"), Pub L. 112-141, H.R. 4348, § 1101(b), July 6, 2012, 126 Stat 405.; preceded by 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 City of Richmond v. J.A. Croson, 488 U.S. 469 (1989).

⁴ Adarand Constructors, Inc. v. Pena, 515 U.S. 200 (1995).

⁵ Western States Paving Co. v. Washington State DOT, 407 F.3d 983 (9th Cir. 2005), cert. denied, 546 U.S. 1170 (2006).

^{6 473} F.3d 715 (7th Cir. 2007).

⁷ 345 F.3d 964 (8th Cir. 2003), cert. denied, 541 U.S. 1041 (2004).

^{8 228} F.3d 1147 (10th Cir. 2000) ("Adarand VII").

New Jersey Transit Corporation⁹, South Florida Chapter of the A.G.C. v. Broward County, Florida 10 , and Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation, et al. 11

The analyses of *Western States Paving* and these other recent cases are instructive to WSDOT 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 26.¹² They also are applicable in terms of the preparation of its DBE Program by WSDOT submitted in compliance with the Federal DBE regulations.

Following *Western States Paving*, it is noteworthy that the USDOT, in particular for agencies in 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.¹³ 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 26.¹⁴ The USDOT's Guidance provides that recipients should consider evidence of discrimination and its effects.¹⁵ The USDOT's Guidance is recognized by the federal regulations as "valid and binding, and constitutes the official position of the Department of Transportation"¹⁶ for states in the Ninth Circuit.

In *Western States Paving*, the United States intervened to defend the Federal DBE Program's facial constitutionality, and, according to the Court, stated "that [the Federal DBE Program's] race conscious measures can be constitutionally applied only in those states where the effects of discrimination are present." Accordingly, the USDOT has advised federal aid recipients that any use of race-conscious measures must be predicated on evidence that the recipient has concerning discrimination or its effects within the local transportation contracting marketplace. 18

Recently in the Ninth Circuit, the United States District Court for the Eastern District of California in AGC, San Diego Chapter, Inc. v. California DOT, et al. held in April 2011 that Caltrans'

^{9 766} F. Supp.2d 642, (D. N.J. 2010).

^{10 544} F. Supp.2d 1336 (S.D. Fla. 2008).

¹¹ U.S.D.C., E.D. Cal, Civil Action No. S-09-1622, Slip Opinion Transcript (E.D. Cal. April 20, 2011), appeal pending, Appeal No. 11-16228, United States Court of Appeals for the Ninth Circuit.

¹² See Northern Contracting, Inc. v. Illinois DOT, 473 F.3d 715 (7th Cir. 2007); Western States Paving, 407 F.3d 983 (9th Cir. 2005); Sherbrooke Turf, Inc. v. Minn. DOT, 345 F.3d 964 (8th Cir. 2003), cert. denied, 541 U.S. 1041 (2004); Adarand Constructors, Inc. v. Slater, 228 F.3d 1147 (10th Cir. 2000) ("Adarand VII").

¹³ Questions and Answers Concerning Response to Western States Paving Company v. Washington State Department of Transportation (January 2006) [hereinafter USDOT Guidance], available at 71 Fed. Reg. 14,775 and http://www.fhwa.dot.gov/civilrights/dbe_memo_a5.htm; see 49 CFR § 26.9; see also 49 C.F.R. Section 26.45.

¹⁴ DOT Guidance, available at http://www.fhwa.dot.gov/civilrights/dbe_memo_a5.htm (January 2006)

¹⁵ *Id*.

¹⁶ Id., 49 C.F.R. § 26.9.

¹⁷ Western States Paving, 407 F.3d at 996; see also Br. for the United States, at 28 (April 19, 2004).

¹⁸ DOT Guidance, available at 71 Fed. Reg. 14,775 and http://www.fhwa.dot.gov/civilrights/dbe_memo_a5.htm (January 2006).

current implementation of the Federal DBE Program is constitutional.¹⁹ The District Court held that the "Caltrans DBE Program is based on substantial statistical and anecdotal evidence of discrimination in the California contracting industry," satisfied the strict scrutiny standard, and is "clearly constitutional" and "narrowly tailored" under *Western States Paving* and the Supreme Court cases.²⁰

¹⁹ Associated General Contractors of America, San Diego Chapter, Inc. v. California DOT, U.S.D.C. E.D. Cal., Civil Action No.S:09-cv-01622, Slip Opinion (E.D. Cal. April 20, 2011) appeal pending, Appeal No. 11-16228, United States Court of Appeals for the Ninth Circuit.

²⁰ *Id.*, Slip Opinion Transcript at 42-56.

B. U.S. Supreme Court Cases

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

In *Croson*, 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 *Adarand I*, the U.S. Supreme Court extended the holding in *Croson* 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 *Adarand I* are the most recent and significant decisions by federal courts setting forth the legal framework for disparity studies as well as the predicate to satisfy the 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 WSDOT 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 WSDOT) based on 49 C.F.R. Part 26.

1. The Federal DBE Program

After the *Adarand* 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.²¹ 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 2003, 2005 and 2012. 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"). In July 2012, Congress passed the Moving Ahead for Progress in the 21st Century Act ("MAP-21").²²

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.²³

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 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

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²¹ 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 Adarand VII, 228 F.3d at 1167-1176, citing The Compelling Interest.

²² Pub L. 112-141, H.R. 4348, § 1101(b), July 6, 2012, 126 Stat 405.

^{23 49} C.F.R. § 26.51.

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.

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.²⁴ This is accomplished by determining the relative number of ready, willing, and able DBEs in the recipient's market.²⁵ Second, the recipient must determine an appropriate adjustment, if any, to the base figure to arrive at the overall goal.²⁶ 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.²⁷ 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. ²⁸

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. ²⁹

A state or local government recipient is responsible for seriously considering and determining race- and gender-neutral measures that can be implemented.³⁰ 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.³¹

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.

²⁴ 49 C.F.R. § 26.45(a), (b), (c).

²⁵ *Id*.

²⁶ Id. at § 26.45(d).

²⁷ Id.

²⁸ 49 C.F.R. § 26.45(b)-(d).

²⁹ 49 C.F.R. § 26.51.

^{30 49} C.F.R. § 26.51(b).

^{31 49} C.F.R. §§ 26.21-26.37.

MAP-21 (July 2012).

In the 2012 Moving Ahead for Progress in the 21st Century Act (MAP-21), Congress provides "Findings" that "discrimination and related barriers" "merit the continuation of the" Federal DBE Program.³² In MAP-21, Congress specifically finds as follows:

- "(A) while significant progress has occurred due to the establishment of the disadvantaged business enterprise program, discrimination and related barriers continue to pose significant obstacles for minority- and women-owned businesses seeking to do business in federally-assisted surface transportation markets across the United States;
- (B) the continuing barriers described in subparagraph (A) merit the continuation of the disadvantaged business enterprise program;
- (C) Congress has received and reviewed testimony and documentation of race and gender discrimination from numerous sources, including congressional hearings and roundtables, scientific reports, reports issued by public and private agencies, news stories, reports of discrimination by organizations and individuals, and discrimination lawsuits, which show that race- and gender-neutral efforts alone are insufficient to address the problem;
- (D) the testimony and documentation described in subparagraph (C) demonstrate that discrimination across the United States poses a barrier to full and fair participation in surface transportation-related businesses of women business owners and minority business owners and has impacted firm development and many aspects of surface transportation-related business in the public and private markets; and
- (E) the testimony and documentation described in subparagraph (C) provide a strong basis that there is a compelling need for the continuation of the disadvantaged business enterprise program to address race and gender discrimination in surface transportation-related business."33

Thus, Congress in MAP-21 determined based on testimony and documentation of race and gender discrimination that there is "a compelling need for the continuation of the" Federal DBE Program.³⁴

U.S. DOT Final Rule, 76 Fed. Reg. 5083 (January 28, 2011).

The United States Department of Transportation promulgated a new Final Rule on January 28, 2011, effective February 28, 2011, 76 Fed. Reg. 5083 (January 28, 2011) ("Final Rule") amending the Federal DBE Program at 49 C.F.R. Part 26. According to the United States DOT, the

³² Pub L. 112-141, H.R. 4348, § 1101(b), July 6, 2012, 126 Stat 405.

³³ Pub L. 112-141, H.R. 4348, § 1101(b), July 6, 2012, 126 Stat 405.

³⁴ *Id*.

Rule increases accountability for recipients with respect to meeting overall goals, modifies and updates certification requirements, adjusts the personal net worth threshold for inflation to \$1.32 million dollars, provides for expedited interstate certification, adds provisions to foster small business participation, provides for additional post-award oversight and monitoring, and addresses other matters.³⁵

In particular, the Final Rule provides that a recipient's DBE Program must include a monitoring and enforcement mechanism to ensure that work committed to DBEs at contract award or subsequently is actually performed by the DBEs to which the work was committed and that this mechanism must include a written certification that the recipient has reviewed contracting records and monitored work sites for this purpose.³⁶

In addition, the Final Rule adds a Section 26.39 to Subpart B to provide for fostering small business participation.³⁷ The recipient's DBE program must include an element to structure contracting requirements to facilitate competition by small business concerns, which must be submitted to the appropriate DOT operating administration for approval by February 28, 2012.³⁸ The new Final Rule provides a list of "strategies" that may be included as part of the small business program, including establishing a race-neutral small business set-aside for prime contracts under a stated amount; requiring bidders on prime contracts to specify elements or specific subcontracts that are of a size that small businesses, including DBEs, can reasonably perform; requiring the prime contractor to provide subcontracting opportunities of a size that small businesses, including DBEs, can reasonably perform; and to meet the portion of the recipient's overall goal it projects to meet through race-neutral measures, ensuring that a reasonable number of prime contracts are of a size that small businesses, including DBEs, can reasonably perform and other strategies.³⁹ The new Final Rule provides that actively implementing program elements to foster small business participation is a requirement of good faith implementation of the recipient's DBE program.⁴⁰

The Final Rule also provides that recipients must take certain specific actions if the awards and commitments shown on its Uniform Report of Awards or Commitments and Payments, at the end of any fiscal year, are less than the overall goal applicable to that fiscal year, in order to be regarded by the DOT as implementing its DBE program in good faith.⁴¹ The Final Rule sets out what action the recipient must take in order to be regarded as implementing its DBE program in good faith, including analyzing the reasons for the difference between the overall goal and its awards and commitments, establishing specific steps and milestones to correct the problems identified, and submitting at the end of the fiscal year a timely analysis and corrective actions to the appropriate operating administration for approval, and additional actions.⁴² The Final Rule provides a list of acts or omissions that DOT will regard the recipient as being in non-compliance for failing to implement its DBE program in good faith, including not submitting its analysis and

^{35 76} F.R. 5083-5101.

³⁶ See 49 C.F.R. § 26.37, 76 F.R. at 5097.

³⁷ 76 F.R. at 5097, January 28, 2011.

³⁸ Id

³⁹ Id. at 5097, amending 49 C.F.R. § 26.39(b)(1)-(5).

⁴⁰ Id. at 5097, amending 49 C.F.R. § 26.39(c).

^{41 76} F.R. at 5098, amending 49 C.F.R. § 26.47(c).

⁴² Id., amending 49 C.F.R. § 26.47(c)(1)-(5).

corrective actions, disapproval of its analysis or corrective actions, or if it does not fully implement the corrective actions.⁴³

The Department states in the Final Rule with regard to disparity studies and in calculating goals, that it agrees "it is reasonable, in calculating goals and in doing disparity studies, to consider potential DBEs (*e.g.*, firms apparently owned and controlled by minorities or women that have not been certified under the DBE program) as well as certified DBEs. This is consistent with good practice in the field as well as with DOT guidance."⁴⁴

The United States DOT in the Final Rule states that there is a continuing compelling need for the DBE program. The DOT concludes that, as court decisions have noted, the DOT's DBE regulations and the statutes authorizing them, "are supported by a compelling need to address discrimination and its effects." The DOT says that the "basis for the program has been established by Congress and applies on a nationwide basis...", notes that both the House and Senate Federal Aviation Administration ("FAA") Reauthorization Bills contained findings reaffirming the compelling need for the program, and references additional information presented to the House of Representatives in a March 26, 2009 hearing before the Transportation and Infrastructure Committee, and a Department of Justice document entitled "The Compelling Interest for Race- and Gender-Conscious Federal Contracting Programs: A Decade Later An Update to the May 23, 1996 Review of Barriers for Minority- and Women-Owned Businesses." This information, the DOT states, "confirms the continuing compelling need for race- and gender-conscious programs such as the DOT DBE program."

2. Strict Scrutiny Analysis

A race- and ethnicity-based program implemented by a state or local government is subject to the strict scrutiny constitutional analysis.⁴⁹ WSDOT'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.⁵⁰

⁴³ Id., amending 49 C.F.R. § 26.47(c)(5).

^{44 76} F.R. at 5092.

^{45 76} F.R. at 5095.

⁴⁶ 76 F.R. at 5095.

⁴⁷ *Id*.

⁴⁸ Id

⁴⁹ Croson, 448 U.S. at 492-493; Adarand Constructors, Inc. v. Pena (Adarand I), 515 U.S. 200, 227 (1995).

⁵⁰ Adarand I, 515 U.S. 200, 227 (1995); Northern 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 Contractors Ass'n of South Florida, Inc. v. Metro. Dade County, 122 F.3d 895 (11th Cir. 1997); Contractors Ass'n of E. Pa. v. City of Philadelphia ("CAEP I"), 6 F.3d 990 (3d Cir. 1993).

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.⁵¹ 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.⁵²

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.⁵³ 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).⁵⁴ 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."⁵⁵ 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).⁵⁶ 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

 $^{^{51}\,\}text{See e.g., Concrete Works, Inc. v. City and County of Denver ("Concrete Works I"), 36\,F.3d\,1513, 1520\,(10th\,Cir.\,1994).}$

⁵² *Id*.

⁵³ 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.

⁵⁴ Id. In the case of Rothe Dev. Corp. v. U.S. Dept. of Defense, 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. See also the discussion below in Section G of the 2012 district court decision in DynaLantic Corp. v. U.S. Department of Defense, et al, __ F.Supp.2d ____, 2012 WL 3356813 (D.D.C. Aug. 15, 2012).

⁵⁵ 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.

⁵⁶ See, e.g., Adarand VII, 228 F.3d at 1167–76; see also Western States Paving, 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").

"good ol' 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.⁵⁷

- 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.⁵⁸
- **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.⁵⁹
- Results of removing affirmative action programs. Congress found evidence that when race-conscious public contracting programs are struck down or discontinued, 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.⁶⁰
- *MAP-21.* Recently, in July 2012, Congress passed MAP-21 (see above), which made "Findings" that "discrimination and related barriers continue to pose significant obstances for minority- and women-owned businesses seeking to do business in federally-assisted surface transportation markets," and that the continuing barriers "merit the continuation" of the Federal DBE Program.⁶¹ Congress also found that it received and reviewed testimony and documentation of race and gender discrimination which "provide a strong basis that there is a compelling need for the continuation of the" Federal DBE Program.⁶²

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.⁶³ If the government makes its initial

⁵⁷ Adarand VII, 228 F.3d. at 1168-70; Western States Paving, 407 F.3d at 992; see DynaLantic, __ F.Supp.2d __, 2012 WL 3356813.

⁵⁸ Adarand VII. at 1170-72; see DynaLantic, ___ F.Supp.2d ___, 2012 WL 3356813.

⁵⁹ Id. at 1172-74; see DynaLantic, ___ F.Supp.2d ___, 2012 WL 3356813.

⁶⁰ Id. at 1174-75.

⁶¹ Pub L. 112-141, H.R. 4348, § 1101(b), July 6, 2012, 126 Stat 405.

⁶² Id. at § 1101(b)(1).

⁶³ 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; Monterey Mechanical Co. v. Wilson, 125 F.3d 702, 713 (9th Cir. 1997); DynaLantic, ___ F.Supp.2d ___, 2012 WL 3356813; Hershell Gill Consulting Engineers, Inc. v. Miami Dade County, 333 F. Supp.2d 1305, 1316 (S.D. Fla. 2004).

showing, the burden shifts to the challenger to rebut that showing.⁶⁴ The challenger bears the ultimate burden of showing that the governmental entity's evidence "did not support an inference of prior discrimination."⁶⁵

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.⁶⁶ "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."

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.⁶⁸ The federal courts have held that a significant statistical disparity between the utilization and availability of minority- and women-owned firms may raise an inference of discriminatory exclusion.⁶⁹ However, a small statistical disparity, standing alone, may be insufficient to establish discrimination.⁷⁰

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. The 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.⁷⁴
- **Disparity index.** An important component of statistical evidence is the "disparity index."⁷⁵ A disparity index is defined as the ratio of the percent utilization to the percent availability

⁶⁴ Adarand VII, 228 F.3d at 1166; Eng'g Contractors Ass'n, 122 F.3d at 916.

⁶⁵ See, e.g., Adarand VII, 228 F.3d at 1166; Eng'g Contractors Ass'n, 122 F.3d at 916; see also Sherbrooke Turf, 345 F.3d at 971; N. Contracting, 473 F.3d at 721.

⁶⁶ See, e.g., Croson, 488 U.S. at 509; N. Contracting, 473 F.3d at 718-19, 723-24; Western States Paving, 407 F.3d at 991; Adarand VII. 228 F.3d at 1166.

⁶⁷ Croson, 488 U.S. at 501, quoting Hazelwood School Dist. v. United States, 433 U.S. 299, 307-08 (1977).

⁶⁸ Croson, 448 U.S. at 509; see Rothe, 545 F.3d at 1041-1042; Concrete Works of Colo., Inc. v. City and County of Denver ("Concrete Works II"), 321 F.3d 950, 959 (10th Cir. 2003); Drabik II, 214 F.3d 730, 734-736.

⁶⁹ See, e.g., Croson, 488 U.S. at 509; Rothe, 545 F.3d at 1041; Concrete Works II, 321 F.3d at 970; see Western States Paving, 407 F.3d at 1001.

⁷⁰ Western States Paving, 407 F.3d at 1001.

⁷¹ See, e.g., Croson, 448 U.S. at 509; 49 C.F.R. § 26.35; Rothe, 545 F.3d at 1041-1042; N. Contracting, 473 F.3d at 718, 722-23; Western States Paving, 407 F.3d at 995.

 $^{^{72}\} Contractors\ Ass'n\ of\ East on\ Pennsylvania,\ Inc.\ v.\ City\ of\ Philadelphia\ ("CAEP\ II"),\ 91\ F.3d\ 586,\ 603\ (3d\ Cir.\ 1996).$

⁷³ *Id*.

⁷⁴ 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.

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." ⁷⁶

■ **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.⁷⁷

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.⁷⁸ But personal accounts of actual discrimination may complement empirical evidence and play an important role in bolstering statistical evidence.⁷⁹ 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.⁸⁰

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/WBEs 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.⁸¹

⁷⁵ 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).

⁷⁶ See, e.g., Ricci v. DeStefano, ___ U.S. ___, 129 S.Ct. 2658, 2678 (2009); Rothe, 545 F.3d at 1041; Eng'g Contractors Ass'n, 122 F.3d at 914, 923; Concrete Works I, 36 F.3d at 1524.

⁷⁷ 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.

⁷⁸ 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).

⁷⁹ 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).

⁸⁰ Concrete Works I, 36 F.3d at 1520.

⁸¹ 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; Concrete Works, 36 F.3d at 1520; Cone Corp. v. Hillsborough County, 908 F.2d 908, 915 (11th Cir. 1990); DynaLantic, __ F.Supp.2d __, 2012 WL 3356813; Florida A.G.C. Council, Inc. v. State of Florida, 303 F. Supp.2d 1307, 1325 (N.D. Fla. 2004).

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.⁸²

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.⁸³

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.⁸⁴ The narrow tailoring requirement has several components.

It should be pointed out that 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 [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."⁸⁵ 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 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.⁸⁶ The Seventh Circuit Court of Appeals analyzed IDOT's compliance with the federal regulations regarding calculation of the availability

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⁸² 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).

⁸³ See, e.g., Rothe, 545 F.3d at 1036; Western States Paving, 407 F3d at 993-995; Sherbrooke Turf, 345 F.3d at 971; Adarand VII, 228 F.3d at 1181; Eng'g Contractors Ass'n, 122 F.3d at 927 (internal quotations and citations omitted).

⁸⁴ Western States Paving, 407 F3d at 995-998; Sherbrooke Turf, 345 F.3d at 970-71.

^{85 473} F.3d at 722.

⁸⁶ Id. at 722.

of DBEs, adjustment of its goal based on local market conditions and its use of race-neutral methods set forth in the federal regulations.⁸⁷ The court held NCI failed to demonstrate that IDOT did not satisfy compliance with the federal regulations (49 C.F.R. Part 26).⁸⁸ Accordingly, the Seventh Circuit Court of Appeals affirmed the district court's decision upholding the validity of IDOT's DBE program.⁸⁹ See the discussion of the *Northern Contracting* decision below in Section E.

In *Western States Paving*, the Ninth Circuit held 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.⁹⁰ Thus, the Ninth Circuit held in *Western States Paving* that mere compliance with the Federal DBE Program does not satisfy strict scrutiny.⁹¹

In *Western States Paving*, 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.⁹²

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.⁹³

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."94 Courts have found that

89 See, e.g., Geod Corp. v. New Jersey Transit Corp., et al., 746 F.Supp 2d 642 (D.N.J. 2010); South Florida Chapter of the A.G.C. v. Broward County, Florida, 544 F.Supp.2d 1336 (S.D. Fla. 2008).

⁸⁷ Id. at 723-24.

⁸⁸ Id.

⁹⁰ Western States Paving, 407 F.3d at 997-98, 1002-03.

⁹¹ Id. at 995-1003. The Seventh Circuit Court of Appeals in Northern Contracting stated in a footnote that the court in Western States Paving "misread" the decision in Milwaukee County Pavers. 473 F.3d at 722, n. 5.

^{92 407} F.3d at 996-1000.

⁹³ 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.

⁹⁴ 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).

"[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 *Associated Gen. Contractors v. Drabik ("Drabik II")*, stated: "*Adarand* 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."

The Supreme Court in *Parents Involved in Community Schools v. Seattle School District*⁹⁷ 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." 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 and 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. In the courts have held unconstitutional those race- and ethnicity-neutral alternatives to increase minority business participation in state and local contracting.

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⁹⁵ See Grutter v. Bollinger, 539 U.S. 306, 339 (2003); Richmond v. J.A. Croson Co., 488 U.S. 469, 509-10 (1989); Western States Paving, 407 F.3d at 993; see also Adarand I, 515 U.S. at 237-38.

⁹⁶ Associated Gen. Contractors of Ohio, Inc. v. Drabik ("Drabik II"), 214 F.3d 730, 738 (6th Cir. 2000).

^{97 551} U.S. 701, 734-37, 127 S.Ct. 2738, 2760-61 (2007)

^{98 551} U.S. 701, 734-37, 127 S.Ct. at 2760-61; see also Grutter v. Bollinger, 539 U.S. 305 (2003).

⁹⁹ 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.

¹⁰⁰ See Croson, 488 U.S. at 507; Drabik I, 214 F.3d at 738 (citations and internal quotations omitted); see also Eng'g Contractors Ass'n, 122 F.3d at 927; Virdi, 135 Fed. Appx. At 268.

The Court in *Croson* 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." ¹⁰¹

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. 103

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;
- 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

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¹⁰¹ Croson, 488 U.S. at 509-510.

^{102 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.

¹⁰³ 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)).

 Streamlining and improving the accessibility of contracts to increase small business participation.¹⁰⁴

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.¹⁰⁵

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; 107 (2) good faith efforts provisions; 108 (3) waiver provisions; 4) a rational basis for goals; 10 (5) graduation provisions; 111 (6) remedies only for groups for which there were findings of discrimination; 112 (7) sunset provisions; 113 and (8) limitation in its geographical scope to the boundaries of the enacting jurisdiction. 114

3. Intermediate Scrutiny Analysis.

Certain Federal Courts of Appeal, including the Ninth Circuit Court of Appeals, apply intermediate scrutiny to gender-conscious programs. The Ninth Circuit and other courts have interpreted this standard to require that gender-based classifications be:

- 1. 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. 116

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-

¹⁰⁴ See 49 C.F.R. § 26.51(b); see, e.g., Croson, 488 U.S. at 509-510; N. Contracting, 473 F.3d at 724; Adarand VII, 228 F.3d 1179; 49 C.F.R. § 26.51(b); Eng'g Contractors Ass'n, 122 F.3d at 927-29.

¹⁰⁵ Western States Paving, 407 F.3d at 993.

¹⁰⁶ Eng'g Contractors Ass'n, 122 F.3d at 927.

¹⁰⁷ 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).

¹⁰⁸ CAEP I, 6 F.3d at 1019; Cone Corp., 908 F.2d at 917.

¹⁰⁹ CAEP I, 6 F.3d at 1009; AGC of Ca., 950 F.2d at 1417; Cone Corp., 908 F.2d at 917.

¹¹⁰ *Id*.

¹¹¹ *Id*.

¹¹² Western States Paving, 407 F.3d at 998; AGC of Ca., 950 F.2d at 1417.

¹¹³ Peightal, 26 F.3d at 1559.

¹¹⁴ Coral Constr., 941 F.2d at 925.

¹¹⁵ 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.")

¹¹⁶ *Id*.

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.¹¹⁷

Intermediate scrutiny, as interpreted by the Ninth Circuit and other 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, it has been held that the intermediate scrutiny standard does not require a showing of government involvement, active or passive, in the discrimination it seeks to remedy. And the Eleventh Circuit has held that "[w]hen a gender-conscious 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." 119

4. Washington State Civil Rights Act: RCW 49.60.400.

Initiative Measure No. 200 was approved by the State of Washington voters in 1998. Initiative 200 is an Act relating to "prohibiting government entities from discriminating or granting preferential treatment based on race, sex, color, ethnicity, or national origin...;" and adding new sections to Chapter 49.60 RCW.

RCW 49.60.400 is known as the Washington State Civil Rights Act. RCW 49.60.400(1) provides that the state shall not discriminate against, or grant preferential treatment to, any individual or group on the basis of race, sex, color, ethnicity, or national origin in the operation of public employment, public education, or public contracting. The Washington State Civil Rights Act (the "Act") provides that it applies only to action taken after December 3, 1998.

Significantly, the Act also provides a federal program exception as follows: "This section does not prohibit action that must be taken to establish or maintain eligibility for any federal program, if ineligibility would result in a loss of federal funds to the state." For purposes of this section of the Act, the term "state" includes, but is not necessarily limited to, the state itself, any city, county, public college or university, community college, school district, special district, or other political subdivision or governmental instrumentality of or within the state. 122

5. Pending Cases (at the time of this report).

There are pending cases in the federal courts, at the time of this report, that may potentially impact and be instructive to WSDOT as a recipient of federal funding under the Federal DBE Program, including the following:

¹¹⁷ *Id.* The Seventh Circuit Court of Appeals, however, in *Builders Ass'n of Greater Chicago v. County of Cook, Chicago*, 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 *Builders Ass'n* rejected the distinction applied by the Eleventh Circuit in *Engineering Contractors*.

¹¹⁸ Coral Constr. Co., 941 F.2d at 931-932; See Eng'g Contractors Ass'n, 122 F.3d at 910.

¹¹⁹ *Id.* at 929 (internal citations omitted.)

¹²⁰ RCW 49.60.400(1).

¹²¹ RCW 49.60.400(6).

¹²² RCW 49.60.400(7).

Midwest Fence Corporation v. United States Department of Transportation and Federal Highway Administration, the Illinois Department of Transportation, the Illinois State Toll Highway Authority, et al. In Midwest Fence Corporation v. USDOT, the FHWA, the Illinois DOT and the Illinois State Toll Highway Authority, Case No. 1:10-3-CV-5627, United States District Court for the Northern District of Illinois, Eastern Division, Plaintiff Midwest Fence Corporation, which is a guardrail, bridge rail and fencing contractor owned and controlled by white males is challenging the constitutionality and the application of the USDOT, Disadvantaged Business Enterprise ("DBE") Program. In addition, Midwest Fence similarly challenges the IDOT's implementation of the Federal DBE Program for federally funded projects, IDOT's implementation of its own DBE Program for state-funded projects and the Illinois State Toll Highway Authority's separate DBE Program.

The federal district court has issued an Opinion and Order denying the Defendants' Motion to Dismiss for lack of standing, denying the federal Defendants' Motion to Dismiss certain Counts of the Complaint as a matter of law, granting IDOT Defendants' Motion to Dismiss certain Counts and granting the Tollway Defendants' Motion to Dismiss certain Counts, but giving leave to Midwest to replead subsequent to this Order. *Midwest Fence Corp. v. United States DOT, Illinois DOT, et al.*, 2011 WL 2551179 (N.D. Ill. June 27, 2011).

Midwest Fence in its Third Amended Complaint challenges the constitutionality of the Federal DBE Program on its face and as applied, and challenges the IDOT's implementation of the Federal DBE Program. Midwest Fence also seeks a declaration that the USDOT regulations have not been properly authorized by Congress and a declaration that SAFETEA-LU is unconstitutional. Midwest Fence seeks relief from the IDOT Defendants, including a declaration that state statutes authorizing IDOT's DBE Program for State-funded contracts are unconstitutional; a declaration that IDOT does not follow the USDOT regulations; a declaration that the IDOT DBE Program is unconstitutional and other relief against the IDOT. The remaining Counts seek relief against the Tollway Defendants, including that the Tollway's DBE Program is unconstitutional, and a request for punitive damages against the Tollway Defendants, which is the subject of a pending Motion to Dismiss.

This case, at the time of this report, is currently in the discovery stage of the litigation.

Geyer Signal, Inc., et al. v. Minnesota DOT, the United States DOT, the Federal Highway Administration, et al. In Geyer Signal, Inc., et al. v. Minnesota DOT, U.S. DOT, Federal Highway Administration, et al., Case No. 11-CV-321, United States District Court for the District Court of Minnesota, the Plaintiffs Geyer Signal, Inc. and its owner filed this lawsuit against the Minnesota DOT seeking a permanent injunction against enforcement and a declaration of unconstitutionality of the Federal DBE Program and Minnesota DOT's implementation of the DBE Program on its face and as applied. Geyer Signal seeks an injunction against the Minnesota DOT prohibiting it from enforcing the DBE Program or, alternatively, from implementing the Program improperly; a declaratory judgment declaring that the DBE Program violates the Equal protection element of the Fifth Amendment of the United States Constitution and/or the Equal Protection clause of the Fourteenth Amendment to the United States Constitution and is unconstitutional, or, in the alternative that Minnesota DOT's implementation of the Program is an unconstitutional violation of the Equal Protection Clause, and/or that the Program is void for vagueness; and other relief.

Plaintiff Geyer Signal is a small, family-owned business that performs traffic control work generally on road construction projects. Geyer Signal is a majority-owned firm by a Caucasian male, who also is a named plaintiff.

Subsequent to the lawsuit filed by Geyer Signal, the USDOT and the Federal Highway Administration ("FHWA") filed their Motion to permit them to intervene as defendants in this case. The Federal Defendant-Intervenors requested intervention on the case in order to defend the constitutionality of the Federal DBE Program and the federal regulations at issue. The Federal Defendant-Intervenors and the Plaintiffs filed a Stipulation that the Federal Defendant-Intervenors have the right to intervene and should be permitted to intervene in the matter, and consequently the Plaintiffs did not contest the Federal Defendant-Intervenor's Motion for Intervention. The Court issued an Order that the Stipulation of Intervention, agreeing that the Federal Defendant-Intervenors may intervene in this lawsuit, be approved and that the Federal Defendant-Intervenors are permitted to intervene in this case.

At the time of this report, the case is pending in the Federal District Court of the District of Minnesota and currently is in the discovery stage of the litigation.

Dunnet Bay Construction Company v. Gary Hanniq, in its official capacity as Secretary of Transportation for the Illinois DOT and the Illinois DOT. In Dunnet Bay Construction Company v. Gary Hannig, in its official capacity as Secretary of the Illinois DOT and the Illinois DOT, Case No. 3:10-CV-3051, in the United States District Court for the Central District of Illinois, Springfield Division, plaintiff Dunnet Bay Construction Company brought a lawsuit against the Secretary of the IDOT in its official capacity and the IDOT challenging the IDOT DBE Program and its implementation of the Federal DBE Program, including an alleged unwritten "no waiver" policy, and that the IDOT's program is not narrowly tailored. The IDOT filed a Motion to Dismiss certain Counts of the Complaint. In an Order from the United States District Court, the Court granted the Motion to Dismiss Counts I, II and III against the IDOT primarily based on the defense of immunity under the Eleventh Amendment to the United States Constitution. The Opinion held that claims in Counts I and II against Secretary Hannig of the IDOT in his official capacity remain pending. In addition, there are other Counts of the Complaint that remain in the case that are not subject to the Motion to Dismiss, which seek injunctive relief and damages based on the challenge to the IDOT DBE Program and its application by the IDOT. Plaintiff Dunnet Bay alleges the IDOT DBE Program is unconstitutional based on the unwritten no-waiver policy, requiring Dunnet Bay to meet DBE goals and denying Dunnet Bay a waiver of the goals despite its good faith efforts, and based on other allegations.

This case is currently pending in the discovery stage with a trial date, at the time of this report, scheduled for 2013. *See*, *Dunnet Bay Construction Company v. Hannig*, 2011 WL 5417123 (C.D. Ill. November 9, 2011) (Court Order denying Dunnet Bay's Motion to Compel Production).

Metro East Black Contractors Organization, Inc. v. Illinois Department of Transportation and the acting Secretary of Transportation in her official Capacity. In Metro East Black Contractors Organization, Inc. v. Illinois DOT and the Acting Secretary of the Illinois DOT in her official capacity, Case No. 3:11-CV-01041, in the United States District Court for the Southern District of Illinois. Plaintiff Metro East Black Contractors Organization ("MEBCO") brought this action against Defendants the IDOT and the Acting Secretary of the IDOT in November 2011. MEBCO is

a not for profit corporate entity that states it is an advocate for African-American and minority contractors and workers in Southern Illinois and Metro East area. The plaintiff MEBCO claims that IDOT has failed to comply with the provisions of the federal regulations (49 C.F.R. Part 26) for multiple reasons relating to its implementation of the Federal DBE Program, including failing to enforce and comply with various provisions of the federal regulations. Plaintiff MEBCO seeks damages and injunctive relief. At the time of this Report, MEBCO is seeking, and the Court has issued an Order permitting MEBCO, to procure new counsel to represent it in this case.

This list of pending cases is not exhaustive, but is illustrative of current pending cases that may impact recipients of federal funds implementing the Federal DBE Program.

Ongoing Review. The above represents a brief summary of the legal framework pertinent to implementation of DBE, MBE/WBE, 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.

- D. Recent Decisions Involving the Federal DBE Program and State or Local Government MBE/WBE Programs In The Ninth Circuit.
- Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation, et al., U.S.D.C., E.D. Cal. Civil Action No. S-09-1622, Slip Opinion (E.D. Cal. April 20, 2011), appeal pending, Appeal No. 11-16228, U.S. Court of Appeals for the Ninth Circuit

This case involved a challenge by the Associated General Contractors of America, San Diego Chapter, Inc. ("AGC") against the California Department of Transportation ("Caltrans"), to the DBE program adopted by Caltrans implementing the Federal DBE Program at 49 C.F.R. Part 26. The AGC sought an injunction against Caltrans enjoining its use of the DBE program and declaratory relief from the court declaring the Caltrans DBE program to be unconstitutional.

Caltrans' DBE program set a 13.5 percent DBE goal for its federally-funded contracts. The 13.5 percent goal, as implemented by Caltrans, included utilizing half race-neutral means and half race-conscious means to achieve the goal. Slip Opinion Transcript at 42. Caltrans did not include all minorities in the race-conscious component of its goal, excluding Hispanic males and Subcontinent Asian American males. *Id.* at 42. Accordingly, the race-conscious component of the Caltrans DBE program applied only to African Americans, Native Americans, Asian Pacific Americans, and white women. *Id.*

Caltrans established this goal and its DBE program following a disparity study conducted by BBC Research & Consulting, which included gathering statistical and anecdotal evidence of race and gender disparities in the California construction industry. Slip Opinion Transcript at 42.

The parties filed motions for summary judgment. The district court issued its ruling at the hearing on the motions for summary judgment granting Caltrans' motion for summary judgment in support of its DBE program and denying the motion for summary judgment filed by the plaintiffs. Slip Opinion Transcript at 54. The court held Caltrans' DBE program applying and implementing the provisions of the Federal DBE Program is valid and constitutional. *Id.* at 56.

The district court analyzed Caltrans' implementation of the DBE program under the strict scrutiny doctrine and found the burden of justifying different treatment by ethnicity or gender is on the government. The district court applied the Ninth Circuit Court of Appeals ruling in *Western States Paving Company v. Washington State DOT*, 407 F.3d 983 (9th Cir. 2005). The court stated 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." Slip Opinion Transcript at 43, *quoting Western States Paving*, 407 F.3d at 991, *citing City of Richmond v. J.A. Croson Company*, 488 U.S. 469 (1989).

The district court pointed out that the Ninth Circuit in *Western States Paving* and the Tenth Circuit Court of Appeals and the Eighth Circuit Court of Appeals have upheld the facial validity of the Federal DBE Program.

The district court stated that based on *Western States Paving*, the court is required to look at the Caltrans DBE program itself to see if there is a strong basis in evidence to show that Caltrans is

acting for a proper purpose and if the program itself has been narrowly tailored. Slip Opinion Transcript at 45. The court concluded that 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." Slip Opinion Transcript at 45.

The district court identified the issues as whether Caltrans has established a compelling interest supported by a strong basis in evidence for its program, and does Caltrans' race-conscious program meet the strict scrutiny required. Slip Opinion Transcript at 51-52. The court also phrased the issue as whether the Caltrans DBE program, "which does give preference based on race and sex, whether that program is narrowly tailored to remedy the effects of identified discrimination...", and whether Caltrans has complied with the Ninth Circuit's guidance in *Western States Paving*. Slip Opinion Transcript at 52.

The district court held "that Caltrans has done what the Ninth Circuit has required it to do, what the federal government has required it to do, and that it clearly has implemented a program which is supported by a strong basis in evidence that gives rise to a compelling interest, and that its race-conscious program, the aspect of the program that does implement race-conscious alternatives, it does under a strict-scrutiny standard meet the requirement that it be narrowly tailored as set forth in the case law." Slip Opinion Transcript at 52.

The court rejected the plaintiff's arguments that anecdotal evidence failed to identify specific acts of discrimination, finding "there are numerous instances of specific discrimination." Slip Opinion Transcript at 52. The district court found that after the *Western States Paving* case, Caltrans went to a racially neutral program, and the evidence showed that the program would not meet the goals of the federally-funded program, and the federal government became concerned about what was going on with Caltrans' program applying only race-neutral alternatives. *Id.* at 52-53. The court then pointed out that Caltrans engaged in an "extensive disparity study, anecdotal evidence, both of which is what was missing" in the *Western States Paving* case. *Id.* at 53.

The court concluded that Caltrans "did exactly what the Ninth Circuit required" and that Caltrans has gone "as far as is required." Slip Opinion Transcript at 53.

The court held that as a matter of law, the Caltrans DBE program is, under *Western States Paving* and the Supreme Court cases, "clearly constitutional," and "narrowly tailored." Slip Opinion Transcript at 56. The court found there are significant differences between Caltrans' program and the program in the *Western States Paving* case. *Id.* at 54-55. In *Western States Paving*, the court said there were no statistical studies performed to try and establish the discrimination in the highway contracting industry, and that Washington simply compared the proportion of DBE firms in the state with the percentage of contracting funds awarded to DBEs on race-neutral contracts to calculate a disparity. *Id.* at 55.

The district court stated that the Ninth Circuit in *Western States Paving* found this to be oversimplified and entitled to little weight "because it did not take into account factors that may affect the relative capacity of DBEs to undertake contracting work." Slip Opinion Transcript at 55. Whereas, the district court held the "disparity study used by Caltrans was much more comprehensive and accounted for this and other factors." *Id.* at 55. The district noted that the

State of Washington did not introduce any anecdotal information. The difference in this case, the district court found, "is that the disparity study includes both extensive statistical evidence, as well as anecdotal evidence gathered through surveys and public hearings, which support the statistical findings of the underutilization faced by DBEs without the DBE program. Add to that the anecdotal evidence submitted in support of the summary judgment motion as well. And this evidence before the Court clearly supports a finding that this program is constitutional." *Id.* at 56.

The court held that because "Caltrans' DBE program is based on substantial statistical and anecdotal evidence of discrimination in the California contracting industry and because the Court finds that it is narrowly tailored, the Court upholds the program as constitutional." Slip Opinion Transcript at 56.

The decision of the district court has been appealed to the Ninth Circuit Court of Appeals.

Western States Paving Co. v. Washington State DOT, 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 *Western States Paving*, 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"). *Id*.

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." *Id.* 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. *Id.* (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). *Id.* 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." *Id.* (citing regulation). Race- and gender-conscious contract goals must be used to achieve any portion of the contract goals not achievable through race- and gender-neutral measures. *Id.* (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." *Id.* (citing regulation).

A prime contractor must use "good faith efforts" to satisfy a contract's DBE utilization goal. *Id.* (citing regulation). However, a state is prohibited from enacting rigid quotas that do not contemplate such good faith efforts. *Id.* (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. *Id.* at 987. In September of 2000, plaintiff again submitted a bid on a project financed with TEA-21 funds and was again rejected in favor of a higher bidding minority-owned subcontracting firm. *Id.* The prime contractor expressly stated that he rejected plaintiff's bid due to the minority utilization requirement. *Id.*

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. *Id*. 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. *Id*. 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. *Id*. Plaintiff appealed to the Ninth Circuit Court of Appeals. *Id*.

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. *Id.* 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." *Id.* 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." *Id.* at 991, *citing City of Richmond v. J.A. Croson Co.*, 488 U.S. 469, 492 (1989) and *Adarand Constructors, Inc. v. Slater ("Adarand VII")*, 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." *Id.* 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. *Id.* 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. *Id.* 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. *Id.* at 992-93. The court accordingly rejected plaintiff's facial challenge. *Id.*

As-applied challenge (State of Washington). Plaintiff alleged TEA-21 was unconstitutional asapplied because there was no evidence of discrimination in Washington's transportation contracting industry. *Id.* at 995. The State alleged that it was not required to independently demonstrate that its application of TEA-21 satisfied strict scrutiny. *Id.* 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." *Id.* at 996; *see also Br. for the United States* 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." *Id.* (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. *Id.* 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. *Id.* However, the court determined that the district court erred in holding that mere compliance with the federal program satisfied strict scrutiny. *Id.* 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. *Id.* 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." *Id.* at 998. The court held that a Sixth Circuit decision to the contrary, *Tennessee Asphalt Co. v. Farris*, 942 F.2d 969, 970 (6th Cir. 1991), misinterpreted earlier case law. *Id.* 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. *Id.* at 998, *citing Croson*, 488 U.S. at 478. The court also found that in *Monterey Mechanical Co. v. Wilson*, 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." *Id.* In *Monterey Mechanical*, 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." *Id.*, *citing Monterey Mechanical*, 125 F.3d at 714. The court found that other courts are in accord. *Id.* at 998-99, *citing Builders Ass'n of Greater Chi. v. County of Cook*, 256 F.3d 642, 647 (7th Cir. 2001); *Associated Gen. Contractors of Ohio, Inc. v. Drabik*, 214 F.3d 730, 737 (6th Cir. 2000); *O'Donnell Constr. Co. v. District of Columbia*, 963 F.2d 420, 427 (D.C. Cir. 1992). Accordingly, the court found that each of the principal minority groups benefited by WSDOT's DBE program must have suffered discrimination within the State. *Id.* at 999.

The court found that WSDOT'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). *Id.* at 1000. The USDOT approved WSDOT goal-setting program and the totality of its 2000 DBE program. *Id.*

Washington conceded that it did not have statistical studies to establish the existence of past or present discrimination. *Id.* 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 action's component. *Id*. The court found that the State's methodology was flawed because the 14 percent figure was based on the earlier 18 percent figure, discussed *supra*, which included contracts with affirmative action components. *Id*. The court concluded that the 14 percent figure did not accurately reflect the performance capacity of DBEs in a race-neutral market. *Id*. The court also found the State conceded as much to the district court. *Id*.

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." *Id.* 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%). *Id.* 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. *Id.*

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.

3. 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 WSDOT voluntarily discontinued its DBE program after the Ninth Circuit decision, *supra*, 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 *Western States*," 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 Paving's 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 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.

4. 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. *Id.* 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. *Id.*

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. *Id.* 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. *Id.* The district court denied the plaintiff's motion for an interlocutory injunction and the plaintiff appealed to the Ninth Circuit Court of Appeals. *Id.*

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. *Id.* 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. *Id.* at 709. The court held that contrary to the district court's finding, such a difference was not *de minimis*. *Id.*

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. *Id.* 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." *Id.* 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." *Id.* at 710-11 (internal citations and quotations omitted). The court found that the statute encouraged set asides and cited *Concrete Works of Colorado v. Denver*, 36 F.3d 1512 (10th Cir. 1994), as analogous support for the proposition. *Id.* 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." *Id.* 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. *Id.* at 712.

The court then conducted strict scrutiny (race), and an intermediate scrutiny (gender) analyses. *Id.* 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. *Id.* at 713. The court found that the statute was not narrowly tailored because the definition of "minority" was overbroad (*e.g.*, inclusion of Aleuts). *Id.* at 714, *citing Wygant v. Jackson Board of Education*, 476 U.S. 267, 284, n. 13 (1986) and *City of Richmond v. J.A. Croson, Co.*, 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." *Id.* at 714, *citing Hopwood v. State of Texas*, 78 F.3d 932, 951 (5th Cir. 1996). The court held that the statute violated the Equal Protection Clause.

5. Associated Gen. Contractors of California, Inc. v. Coalition for Econ. Equity ("AGCC"), 950 F.2d 1401 (9th Cir. 1991)

In *Associated Gen. Contractors of California, Inc. v. Coalition for Econ. Equity ("AGCC")*, the Ninth Circuit Court of Appeals denied plaintiffs 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, *AGCC* is instructive as to the analysis conducted by the Ninth Circuit. The court discussed the utilization of statistical evidence and anecdotal evidence in the context of the strict scrutiny analysis. *Id.* 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 five percent preference given Local Business Enterprises ("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 were defined to include Asian, 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. *Id.* at 1405. The district court denied the Motion for Preliminary Injunction on the AGCC's constitutional claim on the ground that AGCC failed to demonstrate a likelihood of success on the merits. *Id.* at 1412.

The Ninth Circuit Court of Appeals applied the strict scrutiny analysis following the decision of the U.S. Supreme Court in *City of Richmond v. Croson*. The court stated that according to the U.S. Supreme Court in *Croson*, 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 municipalities' legislative jurisdiction, so long as the municipality in some way perpetuated the discrimination to be remedied by the program. *Id.* at 1412-13, *citing Croson* 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 subpart of strict scrutiny review." *Id.* at 1413, *quoting Coral Construction Company v. King County*, 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." *Id.* at 1413 *quoting Coral Construction*, 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. *Id.* 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. *Id.* 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." *Id.* 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. *Id.* at 1414, *quoting Coral Construction*, 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 harrassed by city personnel to discourage them from bidding on city contracts. *Id* 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. *Id*. The court found that such a "combination of convincing anecdotal and statistical evidence is potent." *Id*. at 1415 *quoting Coral Construction*, 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. *Id.* 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. *Id.*

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. *Id.* at 1416.

In its analysis of the "narrowly tailored" requirement, the court focused on three characteristics identified by the decision in *Croson* 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. *Id.* at 1416. Second, the plan should avoid the use of "rigid numerical quotas." *Id.* 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. *Id.* Mechanisms that introduce flexibility into the system also prevent the imposition of a disproportionate burden on a few individuals. *Id.* Third, "an MBE program must be limited in its effective scope to the boundaries of the enacting jurisdiction. *Id.* at 1416 *quoting Coral Construction*, 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. *Id.* 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. *Id.* 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. *Id.* at 1417, n. 12. The Ninth Circuit agreed with the district court that an ironclad 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. *Id.* 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." *Id.* at 1417. The court

stated that the Ordinance was "limited in its geographical scope to the boundaries of the enacting jurisdiction. *Id.* at 1418, *quoting Coral Construction*, 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. *Id.* 1418.

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

In *Coral Construction Co. v. King County*, 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 *City of Richmond v. J.A. Croson Co.* 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. *Id.* 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. *Id.* 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. *Id.*

Nonetheless, the court held that the combination of convincing anecdotal and statistical evidence is potent. *Id.* at 919. The court pointed out that individuals who testified about their personal experiences brought the cold numbers of statistics "convincingly to life." *Id.* at 919, quoting International Brotherhood of Teamsters v. United States, 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. *Id.* at 919, *citing Cone Corp. v. Hillsborough County*, 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. *Id.* 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. *Id.* 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. *Id.* 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. *Id.* 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. *Id.*

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. *Id.* at 922.

The court also found that *Croson* 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. *Id.* at 922, *citing Croson*, 488 U.S. at 492. The court pointed out that the Supreme Court in *Croson* 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. *Id.* 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. *Id.*

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. *Id.* at 922, *citing* Croson, 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. *Id.* Finally, the court stated that an MBE program must be limited in its effective scope to the boundaries of the enacting jurisdiction. *Id.*

Among the various narrowly tailored requirements, the court held consideration of race-neutral alternatives is among the most important. *Id.* 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. *Id.* 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. *Id.* 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. *Id.* The court noted in this case the County considered alternatives, but determined that they were not available as a matter of law. *Id.* 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. *Id.*

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. *Id.* at 923. In addition, the County provided information on assessing Small Business Assistance Programs. *Id.* The court found that King County fulfilled its burden of considering race-neutral alternative programs. *Id.*

A second indicator of a program's narrowly tailoring is program flexibility. *Id.* 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. *Id.* 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. *Id.* 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. *Id.*

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. *Id*. 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. *Id*.

The court concluded that an MBE program must also be limited in its geographical scope to the boundaries of the enacting jurisdiction. *Id.* 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. *Id.* at 925. The court held that the County should ask the question whether a business has been discriminated against in King County. *Id.* 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. *Id.* 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. *Id.*

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. *Id.* 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. *Id.* 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. *Id.* 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. *Id.* 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. *Id.* at 931.

In this case, the court concluded, that King County's WBE preference survived a facial challenge. *Id.* 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. *Id.* 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. *Id.* 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.

E. Recent Decisions Involving the Federal DBE Program and its Implementation 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. *Id.* 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. *Id.* at 720. NCI also forfeited the argument that IDOT's DBE program did not serve a compelling government interest. *Id.* The sole issue on appeal to the Seventh Circuit was whether IDOT's program was narrowly tailored. *Id.*

IDOT typically adopted a new DBE plan each year. *Id.* at 718. In preparing for Fiscal Year 2005, IDOT retained a consulting firm to determine DBE availability. *Id.* The consultant first identified the relevant geographic market (Illinois) and the relevant product market (transportation infrastructure construction). *Id.* The consultant then determined availability of minority- and women-owned firms through analysis of Dun & Bradstreet's Marketplace data. *Id.* This initial list was corrected for errors in the data by surveying the D&B list. *Id.* In light of these surveys, the consultant arrived at a DBE availability of 22.77 percent. *Id.* 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. *Id.* 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). *Id.* at 719. On the basis of all of this data, IDOT adopted a 22.77 percent goal for 2005. *Id.*

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. *Id.* at 720. The court noted that, post-*Adarand*, two other circuits have held that a state may rely on the federal government's compelling interest in implementing a local DBE plan. *Id.* at 720-21, *citing Western States Paving Co., Inc. v. Washington State DOT*, 407 F.3d 983, 987 (9th Cir. 2005), *cert. denied*, 126 S.Ct. 1332 (Feb. 21, 2006) and *Sherbrooke Turf, Inc. v. Minnesota DOT*, 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." *Id.* at 721, *quoting Milwaukee County Pavers Association v. Fielder*, 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. *Id*. The court concluded its holding in *Milwaukee* that a state is insulated from a constitutional attack absent a showing that the state exceeded its federal authority remained applicable. *Id*. at 721-22. The court noted that the Supreme Court in *Adarand Constructors v. Pena*, 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. *Id*. at 722.

The court further clarified the *Milwaukee* opinion in light of the interpretations of the opinions offered in by the Ninth Circuit in *Western States* and Eighth Circuit in *Sherbrooke. Id.* The court stated that the Ninth Circuit in *Western States* misread the *Milwaukee* decision in concluding that *Milwaukee* did not address the situation of an as-applied challenge to a DBE program. *Id.* at 722, n. 5. Relatedly, the court stated that the Eighth Circuit's opinion in *Sherbrooke* (that the *Milwaukee* 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. *Id.* 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. *Id.* 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. *Id.* 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. Id. First, NCI challenged the method by which the local base figure was calculated, the first step in the goalsetting process. Id. NCI argued that the number of registered and prequalified DBEs in Illinois should have simply been counted. Id. The court stated that while the federal regulations list several examples of methods for determining the local base figure, *Id.* 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." Id. (citing 49 C.F.R. § 26.45(c)(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. Id. 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. Id. 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. *Id*.

Second, NCI argued that the IDOT failed to properly adjust its goal based on local market conditions. *Id*. 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. *Id*. 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. *Id*.

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. *Id.* 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. *Id.* 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. *Id.* 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. *Id.*

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. *Id.*

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. *Id.* 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. *Id.* (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. *Id.* 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 its previous method of reviewing a bidder's list. *Id.*

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 its contracting activity and its prime contractors; (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 20 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. *Id.* at *8. One study examined disparities in earnings and business formation rates as between DBEs and their white male-owned counterparts. *Id.* Another study included a survey reporting that DBEs are rarely utilized in non-goals projects. *Id.*

IDOT considered three reports prepared by expert witnesses. *Id.* 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. *Id.* 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." *Id.* 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. *Id.*

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." *Id.* Additionally, witnesses identified 20 prime contractors in IDOT District 1 alone

who rarely or never solicited bids from DBEs on non-goals projects. *Id*. The prime contractors did not respond to IDOT's requests for information concerning their utilization of DBEs. *Id*.

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. *Id.* 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. *Id.*

IDOT's representative testified that the DBE program was administered on a "contract-by-contract basis." *Id.* 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). *Id.* 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. *Id.*

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:

- 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 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.

Id. (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. *Id.*

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 gender-based 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. *Id.* 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. *Id.* 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." *Id.* The court found that the plaintiff did not present persuasive evidence to contradict or explain IDOT's data. *Id.*

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. *Id.* 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. *Id.* 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.

Id. at *23. The court distinguished *Builders Ass'n of Greater Chicago v. County of Cook*, 123 F. Supp.2d 1087 (N.D. Ill. 2000), *aff'd* 256 F.3d 642 (7th Cir. 2001), noting that the program in that case was not federally-funded. *Id.* 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. *Id.* 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. *Id.* 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). *Id.*

The court found "[s]ignificantly, Plaintiff did not question the efficacy or sincerity of these race-and gender-neutral measures." *Id.* 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. *Id.* The court found that IDOT approved 70 percent of waiver requests although waivers were requested on only 8 percent of all contracts. *Id.*, *citing Adarand Constructors, Inc. v. Slater "Adarand VII"*, 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. Ill. 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 IDOT. This case involves the challenge to the Federal DBE Program. The plaintiff contractor sued the IDOT 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 IDOT (*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 IDOT's 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 *Adarand VII* and *Sherbrooke Turf* 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 Adarand VII, 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 IDOT's 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 the entirety of its 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 *Sherbooke Turf* 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). In addition, a firm owned by a white male may qualify as socially and economically disadvantaged. 49 C.F.R. § 26.67(d).

The court analyzed the constitutionality of the IDOT 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 IDOT'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.

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 ("Nebraska DOR") 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 *Adarand*. 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 the 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. *Id.* 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. *Id.* Under the DBE Program, a state receiving federal highway funds must, on an annual basis, submit to USDOT an overall goal for DBE participation in its federally-funded highway contracts. *See*, 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. *See*, 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 USDOT 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 Grutter v. Bollinger*, 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(c)-(d)(Steps 1 and 2). Though the underlying estimates may be inexact, the exercise requires 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 businesses owned and controlled by the socially and economically disadvantaged. While TEA-21 creates a 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 federallyassisted 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 that 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 prescribed 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. *Id.* 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. *Id.* 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*.).

Sherbrooke Turf, Inc. v. Minnesota DOT, 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 DOT claiming the Federal DBE provisions of the 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 USDOT and the FHWA intervened as Federal defendants in the case. *Sherbrooke*, 2001 WL 1502841 at *1.

The United States District Court in *Sherbrooke* relied substantially on the Tenth Circuit Court of Appeals decision in *Adarand Constructors, Inc. v. Slater*, 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 *Croson's* strict scrutiny standard. The court held that the "Constitution calls out for different requirements when a state implements a federal affirmative action program, as opposed to those occasions when a state or locality initiates the Program." *Id.* 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." *Id.* 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. *Id.*

6. 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 *Gross Seed Co. v. Nebraska* (with the USDOT and FHWA 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 ("Nebraska DOR") 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 Nebraska DOR Program or its implementation of the Federal DBE Program. The court points out that the Nebraska DOR Program is adopted in compliance with the Federal DBE Program, and that the USDOT approved the use of Nebraska DOR'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 Nebraska DOR 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 a strict scrutiny analysis based again on the evidence submitted by the federal government as to the Federal DBE Program.

7. 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)

This is the *Adarand* 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. *See Adarand Constructors, Inc. v. Pena*, 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 USDOT 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 *Adarand Constructors, Inc. v. Slater*, 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. *Id.* 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." *Id.* 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." *Id.*

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. *Id.* at 1187-1188.

8. *Geod Corporation v. New Jersey Transit Corporation, et. al.*, 746 F. Supp.2d 642, 2010 WL 4193051 (D. N. J. October 19, 2010)

Plaintiffs, white male owners of Geod Corporation ("Geod"), brought this action against the New Jersey Transit Corporation ("NJT") alleging discriminatory practices by *NJT* in designing and implementing the Federal DBE program. 746 F. Supp 2d at 644. The Plaintiffs alleged that the *NJT's* DBE program violated the United States Constitution, 42 U.S.C. § 1981, Title VI of the Civil Rights Act of 1964, 42 U.S.C. § 2000(d) and state law. The district court previously dismissed the Complaint against all Defendants except for NJT and concluded that a genuine issue material fact existed only as to whether the method used by NJT to determine its DBE goals during 2010 were sufficiently narrowly tailored, and thus constitutional. *Id*.

New Jersey Transit Program and Disparity Study

NJT relied on the analysis of consultants for the establishment of their goals for the DBE program. The study established the effects of past discrimination, the district court found, by looking at the disparity and utilization of DBEs compared to their availability in the market. *Id.* at 648. The study used several data sets and averaged the findings in order to calculate this ratio, including: (1) the New Jersey DBE vendor List; (2) a Survey of Minority-Owned Business Enterprises (SMOBE) and a Survey of Women-Owned Enterprises (SWOBE) as determined by the U.S. Census Bureau; and (3) detailed contract files for each racial group. *Id.*

The court found the study determined an average annual utilization of 23 percent for DBEs, and to examine past discrimination, several analyses were run to measure the disparity among DBEs by race. *Id.* at 648. The Study found that all but one category was underutilized among the racial and ethnic groups. *Id.* All groups other than Asian DBEs were found to be underutilized. *Id.*

The court held that the test utilized by the study, "conducted to establish a pattern of discrimination against DBEs, proved that discrimination occurred against DBEs during the prequalification process and in the number of contracts that are awarded to DBEs. *Id.* at 649. The court found that DBEs are more likely than non-DBEs to be pre-qualified for small construction contracts, but are less likely to pre-qualify for larger construction projects. *Id.*

For fiscal year 2010, the study consultant followed the "three-step process pursuant to USDOT regulations to establish the NJT DBE goal." *Id.* at 649. First, the consultant determined "the base figure for the relative availability of DBEs in the specific industries and geographical market from which DBE and non-DBE contractors are drawn." *Id.* In determining the base figure, the consultant (1) defined the geographic marketplace, (2) identified "the relevant industries in which NJ Transit contracts," and (3) calculated "the weighted availability measure." *Id.* at 649.

The court found that the study consultant used political jurisdictional methods and virtual methods to pinpoint the location of contracts and/or contractors for NJT, and determined that the geographical market place for NJT contracts included New Jersey, New York and Pennsylvania. *Id.* at 649. The consultant used contract files obtained from NJT and data obtained from Dun & Bradstreet to identify the industries with which NJT contracts in these geographical areas. *Id.* The consultant then used existing and estimated expenditures in these particular industries to determine weights corresponding to NJT contracting patterns in the different industries for use in the availability analysis. *Id.*

The availability of DBEs was calculated by using the following data: Unified Certification Program Business Directories for the states of New Jersey, New York and Pennsylvania; NJT Vendor List; Dun & Bradstreet database; 2002 Survey of Small Business Owners; and NJT Pre-Qualification List. *Id.* at 649-650. The availability rates were then "calculated by comparing the number of ready, willing, and able minority and women-owned firms in the defined geographic marketplace to the total number of ready, willing, and able firms in the same geographic marketplace. *Id.* The availability rates in each industry were weighed in accordance with NJT expenditures to determine a base figure. *Id.*

Second, the consultant adjusted the base figure due to evidence of discrimination against DBE prime contractors and disparities in small purchases and construction pre-qualification. *Id.* at 650. The discrimination analysis examined discrimination in small purchases, discrimination in pre-qualification, two regression analyses, an Essex County disparity study, market discrimination, and previous utilization. *Id.* at 650.

The Final Recommendations Report noted that there were sizeable differences in the small purchases awards to DBEs and non-DBEs with the awards to DBEs being significantly smaller. *Id.* at 650. DBEs were also found to be less likely to be pre-qualified for contracts over \$1 million in comparison to similarly situated non-DBEs. *Id.* The regression analysis using the dummy variable method yielded an average estimate of a discriminatory effect of -28.80 percent. *Id.* The

discrimination regression analysis using the residual difference method showed that on average 12.2 percent of the contract amount disparity awarded to DBEs and non-DBEs was unexplained. *Id*.

The consultant also considered evidence of discrimination in the local market in accordance with 49 C.F.R. § 26.45(d). The Final Recommendations Report cited in the 2005 Essex County Disparity Study suggested that discrimination in the labor market contributed to the unexplained portion of the self-employment, employment, unemployment, and wage gaps in Essex County, New Jersey. *Id.* at 650.

The consultant recommended that NJT focus on increasing the number of DBE prime contractors. Because qualitative evidence is difficult to quantify, according to the consultant, only the results from the regression analyses were used to adjust the base goal. *Id.* The base goal was then adjusted from 19.74 percent to 23.79 percent. *Id.*

Third, in order to partition the DBE goal by race-neutral and race-conscious methods, the consultant analyzed the share of all DBE contract dollars won with no goals. *Id.* at 650. He also performed two different regression analyses: one involving predicted DBE contract dollars and DBE receipts if the goal was set at zero. *Id.* at 651. The second method utilized predicted DBE contract dollars with goals and predicted DBE contract dollars without goals to forecast how much firms with goals would receive had they not included the goals. *Id.* The consultant averaged his results from all three methods to conclude that the fiscal year 2010 NJT a portion of the race-neutral DBE goal should be 11.94 percent and a portion of the race-conscious DBE goal should be 11.84 percent. *Id.* at 651.

The district court applied the strict scrutiny standard of review. The district court already decided, in the course of the motions for summary judgment, that compelling interest was satisfied as New Jersey was entitled to adopt the federal government's compelling interest in enacting TEA-21 and its implementing regulations. *Id.* at 652, *citing Geod v. N.J. Transit Corp.*, 678 F.Supp.2d 276, 282 (D.N.J. 2009). Therefore, the court limited its analysis to whether NJT's DBE program was narrowly tailored to further that compelling interest in accordance with "its grant of authority under federal law." *Id.* at 652 *citing Northern Contracting, Inc. v. Illinois Department of Transportation*, 473 F.3d 715, 722 (7th Cir. 2007).

Applying Northern Contracting v. Illinois

The district court clarified its prior ruling in 2009 (*see* 678 F.Supp.2d 276) regarding summary judgment, that the court agreed with the holding in *Northern Contracting, Inc. v. Illinois*, 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." *Id.* at 652 *quoting Northern Contracting*, 473 F.3d at 721. The district court in *Geod* followed the Seventh Circuit explanation that when a state department of transportation is acting as an instrument of federal policy, a plaintiff cannot collaterally attack the federal regulations through a challenge to a state's program. *Id.* at 652, *citing Northern Contracting*, 473 F.3d at 722. Therefore, the district court held that the inquiry is limited to the question of whether the state department of transportation "exceeded its grant of authority under federal law." *Id.* at 652-653, *quoting Northern Contracting*, 473 F.3d at 722 and *citing also Tennessee Asphalt Co. v. Farris*, 942 F.2d 969, 975 (6th Cir. 1991).

The district court found that the holding and analysis in *Northern Contracting* does not contradict the Eighth Circuit's analysis in *Sherbrooke Turf, Inc. v. Minnesota Department of Transportation*, 345 F.3d 964, 970-71 (8th Cir. 2003). *Id.* at 653. The court held that the Eighth Circuit's discussion of whether the DBE programs as implemented by the State of Minnesota and the State of Nebraska were narrowly tailored focused on whether the states were following the USDOT regulations. *Id.* at 653 *citing Sherbrooke Turf*, 345 F.3d 973-74. Therefore, "only when the state exceeds its federal authority is it susceptible to an as-applied constitutional challenge." *Id.* at 653 *quoting Western States Paving Co., Inc. v. Washington State Department of Transportation*, 407 F.3d 983 (9th Cir. 2005)(McKay, C.J.)(concurring in part and dissenting in part) and *citing South Florida Chapter of the Associated General Contractors v. Broward County*, 544 F.Supp.2d 1336, 1341 (S.D.Fla.2008).

The court held the initial burden of proof falls on the government, but once the government has presented proof that its affirmative action plan is narrowly tailored, the party challenging the affirmative action plan bears the ultimate burden of proving that the plan is unconstitutional. *Id.* at 653.

In analyzing whether NJT's DBE program was constitutionally defective, the district court focused on the basis of plaintiffs' argument that it was not narrowly tailored because it includes in the category of DBEs racial or ethnic groups as to which the plaintiffs alleged NJT had no evidence of past discrimination. *Id.* at 653. The court found that most of plaintiffs' arguments could be summarized as questioning whether NJT presented demonstrable evidence of the availability of ready, willing and able DBEs as required by 49 C.F.R. § 26.45. *Id.* The court held that NJT followed the goal setting process required by the federal regulations. *Id.* The court stated that NJT began this process with the 2002 disparity study that examined past discrimination and found that all of the groups listed in the regulations were underutilized with the exception of Asians. *Id.* at 654. In calculating the fiscal year 2010 goals, the consultant used contract files and data from Dun & Bradstreet to determine the geographical location corresponding to NJT contracts and then further focused that information by weighting the industries according to NJT's use. *Id.*

The consultant used various methods to calculate the availability of DBEs, including: the UCP Business Directories for the states of New Jersey, New York and Pennsylvania; NJT Vendor List; Dun & Bradstreet database; 2002 Survey of Small Business Owners; and NJT Pre-Qualification List. *Id.* at 654. The court stated that NJT only utilized one of the examples listed in 49 C.F.R. § 26.45(c), the DBE directories method, in formulating the fiscal year 2010 goals. *Id.*

The district court pointed out, however, the regulations state that the "examples are provided as a starting point for your goal setting process and that the examples are not intended as an exhaustive list. *Id.* at 654, *citing* 46 C.F.R. § 26.45(c). The court concluded the regulations clarify that other methods or combinations of methods to determine a base figure may be used. *Id.* at 654.

The court stated that NJT had used these methods in setting goals for prior years as demonstrated by the reports for 2006 and 2009. *Id.* at 654. In addition, the court noted that the Seventh Circuit held that a custom census, the Dun & Bradstreet database, and the IDOT's list of

DBEs were an acceptable combination of methods with which to determine the base figure for TEA-21 purposes. *Id.* at 654, *citing Northern Contracting*, 473 F.3d at 718.

The district court found that the expert witness for plaintiffs had not convinced the court that the data were faulty, and the testimony at trial did not persuade the court that the data or regression analyses relied upon by NJT were unreliable or that another method would provide more accurate results. *Id.* at 654-655.

The court in discussing step two of the goals setting process pointed out that the data examined by the consultant is listed in the regulations as proper evidence to be used to adjust the base figure. *Id.* at 655, *citing* 49 C.F.R. § 26.45(d). These data included evidence from disparity studies and statistical disparities in the ability of DBEs to get pre-qualification. *Id.* at 655. The consultant stated that evidence of societal discrimination was not used to adjust the base goal and that the adjustment to the goal was based on the discrimination analysis, which controls for size of firm and effect of having a DBE goal. *Id.* at 655.

The district court then analyzed NJT's division of the adjusted goal into race-conscious and race-neutral portions. *Id.* at 655. The court noted that narrowly tailoring does not require exhaustion of every conceivable race-neutral alternative, but instead requires serious, good faith consideration of workable race-neutral alternatives. *Id.* at 655. The court agreed with *Western States Paving* that only "when race-neutral efforts prove inadequate do these regulations authorize a State to resort to race-conscious measures to achieve the remainder of its DBE utilization goal." *Id.* at 655, *quoting Western States Paving*, 407 F.3d at 993-94.

The court found that the methods utilized by NJT had been used by it on previous occasions, which were approved by the USDOT. *Id.* at 655. The methods used by NJT, the court found, also complied with the examples listed in 49 C.F.R. § 26.51, including arranging solicitations, times for the presentation of bids, quantities, specifications, and delivery schedules in ways that facilitate DBE participation; providing pre-qualification assistance; implementing supportive services programs; and ensuring distribution of DBE directories. *Id.* at 655. The court held that based on these reasons and following the *Northern Contracting, Inc. v. Illinois* line of cases, NJT's DBE program did not violate the Constitution as it did not exceed its federal authority. *Id.* at 655.

However, the district court also found that even under the *Western States Paving Co., Inc. v. Washington State DOT* standard, the NJT program still was constitutional. *Id.* at 655. Although the court found that the appropriate inquiry is whether NJT exceeded its federal authority as detailed in *Northern Contracting, Inc. v. Illinois*, the court also examined the NJT DBE program under *Western States Paving Co. v. Washington State DOT. Id.* at 655-656. The court stated that under *Western States Paving*, a Court must "undertake an as-applied inquiry into whether [the state's] DBE program is narrowly tailored." *Id.* at 656, *quoting Western States Paving*, 407 F.3d at 997.

Applying Western States Paving

The district court then analyzed whether the NJT program was narrowly tailored applying *Western States Paving*. Under the first prong of the narrowly tailoring analysis, a remedial program is only narrowly tailored if its application is limited to those minority groups that have actually suffered discrimination. *Id.* at 656, *citing Western States Paving*, 407 F.3d at 998. The

court acknowledged that according to the 2002 Final Report, the ratios of DBE utilization to DBE availability was 1.31. *Id.* at 656. However, the court found that the Plaintiffs' argument failed as the facts in *Western States Paving* were distinguishable from those of NJT, because NJT did receive complaints, *i.e.*, anecdotal evidence, of the lack of opportunities for Asian firms. *Id.* at 656. NJT employees testified that Asian firms informally and formally complained of a lack of opportunity to grow and indicated that the DBE program was assisting with this issue. *Id.* In addition, Plaintiff's expert conceded that Asian firms have smaller average contract amounts in comparison to non-DBE firms. *Id.*

The Plaintiff relied solely on the utilization rate as evidence that Asians are not discriminated against in NJT contracting. *Id.* at 656. The court held this was insufficient to overcome the consultant's determination that discrimination did exist against Asians, and thus this group was properly included in the DBE program. *Id.* at 656.

The district court rejected Plaintiffs' argument that the first step of the narrow tailoring analysis was not met because NJT focuses its program on sub-contractors when NJT's expert identified "prime contracting" as the area in which NJT procurements evidence discrimination. *Id.* at 656. The court held that narrow tailoring does not require exhaustion of every conceivable raceneutral alternative but it does require serious, good faith consideration of workable race-neutral alternatives. *Id.* at 656, *citing Sherbrook Turf*, 345 F.3d at 972 (*quoting Grutter v. Bollinger*, 539 U.S. 306, 339, (2003)). In its efforts to implement race-neutral alternatives, the court found NJT attempted to break larger contracts up in order to make them available to smaller contractors and continues to do so when logistically possible and feasible to the procurement department. *Id.* at 656-657.

The district court found NJT satisfied the third prong of the narrowly tailored analysis, the "relationship of the numerical goals to the relevant labor market." *Id.* at 657. Finally, under the fourth prong, the court addressed the impact on third-parties. *Id.* at 657. The court noted that placing a burden on third parties is not impermissible as long as that burden is minimized. *Id.* at 657, *citing Western States Paving*, 407 F.3d at 995. The court stated that instances will inevitably occur where non-DBEs will be bypassed for contracts that require DBE goals. However, TEA-21 and its implementing regulations contain provisions intended to minimize the burden on non-DBEs. *Id.* at 657, *citing Western States Paving*, 407 F.3d at 994-995.

The court pointed out the Ninth Circuit in *Western States Paving* found that inclusion of regulations allowing firms that were not presumed to be DBEs to demonstrate that they were socially and economically disadvantaged, and thus qualified for DBE programs, as well as the net worth limitations, were sufficient to minimize the burden on DBEs. *Id.* at 657, *citing Western States Paving*, 407 F.3d at 955. The court held that the Plaintiffs did not provide evidence that NJT was not complying with implementing regulations designed to minimize harm to third parties. *Id.*

Therefore, even if the district court utilized the as-applied narrow tailoring inquiry set forth in *Western States Paving*, NJT's DBE program would not be found to violate the Constitution, as the court held it was narrowly tailored to further a compelling governmental interest. *Id.* at 657.

9. Geod Corporation v. New Jersey Transit Corporation, et. seq. 678 F.Supp.2d 276, 2009 WL 2595607 (D.N.J. August 20, 2009)

Plaintiffs Geod and its officers, who are white males, sued the 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 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.

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." *Id*.

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." *Id.* 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. *Id.* The court held that NJT does not need to justify establishing its DBE program, as it has already been justified by the legislature. *Id.*

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. *Id*.

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. *Id.*, *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. *Id*.

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. *Id*.

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. *Id.* at *6, *citing Western States Paving Company*, 407 F.3d at 983, 988.

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. *Id.* at *6, *citing* 49 C.F.R. § 26.45(c). 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. *Id.* 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. *Id.* 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. *Id.* Also, the court stated that "perhaps more importantly, NJT's DBE goal was approved by the USDOT every year from 2002 until 2008." *Id.* 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(c). *Id.* 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. *Id.*

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(c). 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. *Id.* at *6.

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. *Id.* 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. *Id.* A decomposition analysis was also performed. *Id.*

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). *Id*.

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. *Id.* 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. *Id*.

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. *Id.* 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. *Id.* 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. *Id.* 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.

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. South Florida Chapter of the Associated General Contractors v. Broward County, Florida, 544 F. Supp.2d 1336 (S.D. Fla. 2008)

Plaintiff, the South Florida Chapter of the Associated General Contractors, brought suit against the Defendant, Broward County, Florida challenging Broward County's implementation of the Federal DBE Program and Broward County's issuance of contracts pursuant to the Federal DBE Program. Plaintiff filed a Motion for a Preliminary Injunction. The court considered only the threshold legal issue raised by Plaintiff in the Motion, namely whether or not the decision in *Western States Paving Company v. Washington State Department of Transportation*, 407 F.3d 983 (9th Cir. 2005) should govern the Court's consideration of the merits of Plaintiffs' claim. 544 F.Supp.2d at 1337. The court identified the threshold legal issue presented as essentially, "whether compliance with the federal regulations is all that is required of Defendant Broward County." *Id.* at 1338.

The Defendant County contended that as a recipient of federal funds implementing the Federal DBE Program, all that is required of the County is to comply with the federal regulations, relying on case law from the Seventh Circuit in support of its position. 544 F.Supp.2d at 1338, *citing Northern Contracting v. Illinois*, 473 F.3d 715 (7th Cir. 2007). The Plaintiffs disagreed, and contended that the County must take additional steps beyond those explicitly provided for in the federal regulations to ensure the constitutionality of the County's implementation of the Federal DBE Program, as administered in the County, *citing Western States Paving*, 407 F.3d 983. The court found that there was no case law on point in the Eleventh Circuit Court of Appeals. *Id.* at 1338.

Ninth Circuit Approach: Western States

The district court analyzed the Ninth Circuit Court of Appeals approach in *Western States Paving* and the Seventh Circuit approach in *Milwaukee County Pavers Association v. Fiedler*, 922 F.2d 419 (7th Cir. 1991) and *Northern Contracting*, 473 F.3d 715. The district court in *Broward County* concluded that the Ninth Circuit in *Western States Paving* held that whether Washington's DBE program is narrowly tailored to further Congress's remedial objective depends upon the presence or absence of discrimination in the State's transportation contracting industry, and that it was error for the district court in *Western States Paving* to uphold Washington's DBE program simply because the state had complied with the federal regulations. 544 F.Supp.2d at 1338-1339. The district court in *Broward County* pointed out that the Ninth Circuit in *Western States Paving* concluded it would be necessary to undertake an as-applied inquiry into whether the state's program is narrowly tailored. 544 F.Supp.2d at 1339, *citing Western States Paving*, 407 F.3d at 997.

In a footnote, the district court in *Broward County* noted that the USDOT "appears not to be of one mind on this issue, however." 544 F.Supp.2d at 1339, n. 3. The district court stated that the "United States DOT has, in analysis posted on its Web site, implicitly instructed states and localities outside of the Ninth Circuit to ignore the *Western States Paving* decision, which would tend to indicate that this agency may not concur with the 'opinion of the United States' as represented in *Western States*." 544 F.Supp.2d at 1339, n. 3. The district court noted that the United States took the position in the *Western States Paving* case that the "state would have to have evidence of past or current effects of discrimination to use race-conscious goals." 544 F.Supp.2d at 1338, *quoting Western States Paving*.

The Court also pointed out that the Eighth Circuit Court of Appeals in *Sherbrooke Turf, Inc. v. Minnesota Department of Transportation*, 345 F.3d 964 (8th Cir. 2003) reached a similar conclusion as in *Western States Paving*. 544 F.Supp.2d at 1339. The Eighth Circuit in *Sherbrooke*, like the court in *Western States Paving*, "concluded that the federal government had delegated the task of ensuring that the state programs are narrowly tailored, and looked to the underlying data to determine whether those programs were, in fact, narrowly tailored, rather than simply relying on the states' compliance with the federal regulations." 544 F.Supp.2d at 1339.

Seventh Circuit Approach: Milwaukee County and Northern Contracting

The district court in *Broward County* next considered the Seventh Circuit approach. The Defendants in *Broward County* agreed that the County must make a local finding of discrimination for its program to be constitutional. 544 F.Supp.2d at 1339. The County, however, took the position that it must make this finding through the process specified in the federal regulations, and should not be subject to a lawsuit if that process is found to be inadequate. *Id.* In support of this position, the County relied primarily on the Seventh Circuit's approach, first articulated in *Milwaukee County Pavers Association v. Fiedler*, 922 F.2d 419 (7th Cir. 1991), then reaffirmed in *Northern Contracting*, 473 F.3d 715 (7th Cir. 2007). 544 F.Supp.2d at 1339.

Based on the Seventh Circuit approach, insofar as the state is merely doing what the statute and federal regulations envisage and permit, the attack on the state is an impermissible collateral attack on the federal statute and regulations. 544 F.Supp.2d at 1339-1340. This approach

concludes that a state's role in the federal program is simply as an agent, and insofar "as the state is merely complying with federal law it is acting as the agent of the federal government and is no more subject to being enjoined on equal protection grounds than the federal civil servants who drafted the regulations." 544 F.Supp.2d at 1340, *quoting Milwaukee County Pavers*, 922 F.2d at 423.

The Ninth Circuit addressed the *Milwaukee County Pavers* case in *Western States Paving*, and attempted to distinguish that case, concluding that the constitutionality of the federal statute and regulations were not at issue in *Milwaukee County Pavers*. 544 F.Supp.2d at 1340. In 2007, the Seventh Circuit followed up the critiques made in *Western States Paving* in the *Northern Contracting* decision. *Id*. The Seventh Circuit in *Northern Contracting* concluded that the majority in *Western States Paving* misread its decision in *Milwaukee County Pavers* as did the Eighth Circuit Court of Appeals in *Sherbrooke*. 544 F.Supp.2d at 1340, *citing Northern Contracting*, 473 F.3d at 722, n.5. The district court in Broward County pointed out that the Seventh Circuit in *Northern Contracting* emphasized again that the state DOT is acting as an instrument of federal policy, and a plaintiff cannot collaterally attack the federal regulations through a challenge to the state DOT's program. 544 F.Supp.2d at 1340, *citing Northern Contracting*, 473 F.3d at 722.

The district court in *Broward County* stated that other circuits have concurred with this approach, including the Sixth Circuit Court of Appeals decision in *Tennessee Asphalt Company v. Farris*, 942 F.2d 969 (6th Cir. 1991). 544 F.Supp.2d at 1340. The district court in *Broward County* held that the Tenth Circuit Court of Appeals took a similar approach in *Ellis v. Skinner*, 961 F.2d 912 (10th Cir. 1992). 544 F.Supp.2d at 1340. The district court in *Broward County* held that these Circuit Courts of Appeal have concluded that "where a state or county fully complies with the federal regulations, it cannot be enjoined from carrying out its DBE program, because any such attack would simply constitute an improper collateral attack on the constitutionality of the regulations." 544 F.Supp.2d at 1340-41.

The district court in *Broward County* held that it agreed with the approach taken by the Seventh Circuit Court of Appeals in *Milwaukee County Pavers* and *Northern Contracting* and concluded that "the appropriate factual inquiry in the instant case is whether or not Broward County has fully complied with the federal regulations in implementing its DBE program." 544 F.Supp.2d at 1341. It is significant to note that the Plaintiffs did not challenge the as-applied constitutionality of the federal regulations themselves, but rather focused their challenge on the constitutionality of Broward County's actions in carrying out the DBE program. 544 F.Supp.2d at 1341. The district court in *Broward County* held that this type of challenge is "simply an impermissible collateral attack on the constitutionality of the statute and implementing regulations." *Id*.

The district court concluded that it would apply the case law as set out in the Seventh Circuit Court of Appeals and concurring circuits, and that the trial in this case would be conducted solely for the purpose of establishing whether or not the County has complied fully with the federal regulations in implementing its DBE program. 544 F.Supp.2d at 1341.

Subsequently, there was a Stipulation of Dismissal filed by all parties in the district court, and an Order of Dismissal was filed without a trial of the case in November 2008.

11. Klaver Construction, Inc. v. Kansas DOT, 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. H. B. Rowe Co., Inc. v. W. Lyndo Tippett, NCDOT, et al., 615 F.3d 233 (4th Cir. 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 the North Carolina Department of Transportation ("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. 615 F.3d 233 at 236. 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. *Id*.

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." 615 F.3d 233 at 236. The Court also noted that federal courts of appeal "have uniformly upheld the Federal DBE Program against equal-protection challenges." *Id.*, at footnote 1, *citing*, *Adarand Constructors*, *Inc. v. Slater*, 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. 615 F.3d 233 at 238. 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. *Id*.

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. 615 F.3d 233 at 238-239. 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 womenowned businesses ... [that] shall not be applied rigidly on specific contracts or projects." *Id.* at 239, *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. *Id*.

Third, the amended statute narrowed the definition of "minority" to encompass only those groups that have suffered discrimination. *Id.* at 239. 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." *Id.* at 239 *quoting* section 136-28.4(c)(2)(2010).

Fourth, the amended statute required the NCDOT to reevaluate the Program over time and respond to changing conditions. 615 F.3d 233 at 239. Accordingly, the NCDOT must conduct a study similar to the 2004 study at least every five years. *Id.* § 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. *Id.* 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. 615 F.3d 233 at 239.

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." 615 F.3d 233 at 241. 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." Id. at 241 quoting Alexander v. Estepp, 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." Id., quoting Shaw v. Hunt, 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. 615 F.3d 233 at 241 *quoting*, *Croson*, 488 U.S. at 504 and *Wygant v. Jackson Board of Education*, 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." 615 F.3d 233 at 241, *quoting Rothe Dev. Corp. v. Department of Defense,* 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." *Id.* at 241. (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. 615 F.3d 233 at 241, *citing Concrete Works*, 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. *Id.* at 241, *citing Croson*, 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." *Id.* at 241, *quoting Maryland Troopers Association, Inc. v. Evans*, 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. *Id.* at 241-242, *citing Concrete Works*, 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. *Id.* at 242 (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. *Id.* at 242, *citing Concrete Works*, 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. 615 F.3d 233 at 242, *citing Alexander*, 95 F.3d at 315 (*citing Adarand*, 515 U.S. at 227).

Intermediate scrutiny. The Court held that courts apply "intermediate scrutiny" to statutes that classify on the basis of gender. Id. at 242. 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." Id., quoting Mississippi University for Women v. Hogan, 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. Id. at 242. 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." Id. at 242, quoting Engineering Contractors, 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." 615 F.3d 233 at 242 *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 242 *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." Id. at 243, quoting West Virginia v. U.S. Department of Health & Human Services, 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. 615 F.3d 233 at 243. 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 *Croson*, a number of our sister circuits have recognized the utility of the disparity index in determining statistical disparities in the utilization of minority- and womenowned businesses. *Id.* at 243-244 (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." *Id.* at 244. Accordingly, the study considered only a disparity index lower than 80 as warranting further investigation. *Id.*

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." 615 F.3d 233 at 244, *quoting Eng'g Contractors*, 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." *Id.*, *citing Eng'g Contractors*, 122 F.3d at 914.

The study analyzed the participation of minority and women subcontractors in construction contracts awarded and managed from the central NCDOT office in Raleigh, North Carolina. 615 F.3d 233 at 244. 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). *Id.* at 244.

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 NCDOT 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. 615 F.3d 233 at 244, n.6. These data were not relied upon in forming the opinions relating to the study. *Id.* at 244, 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. 615 F.3d 233 at 244. 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. *Id.* at 245. The Court also noted that the consultant submitted its master list to the NCDOT for verification. *Id.* at 245.

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. 615 F.3d 233 at 245.

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. 615 F.3d 233 245. 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. 615 F.3d 233 at 245. 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. *Id*.

To corroborate the disparity study, the consultant 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. 615 F.3d 233 at 246. The consultant obtained the data from a telephone survey of firms that conducted or attempted to conduct business with the NCDOT. The survey pool consisted of a random sample of such firms. *Id*.

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. 615 F.3d 233 at 246. 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. *Id.* 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. *Id.*

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." 615 F.3d 233 at 246. 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. *Id.* 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 plaintiffs challenge to the availability estimate failed because it could not demonstrate that the 2004 study's availability estimate was inadequate. *Id.* at 246. The Court cited *Concrete Works*, 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. *Id.* at 246-247, *citing Concrete Works*, 321 F.3d 991 and *Sherbrooke Turf, 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*. 615 F.3d 233 at 247. 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. *Id*. The Court concluded plaintiff did not offer any contrary evidence. *Id*.

The Court found that the State bolstered its position by presenting evidence that minority subcontractors have the capacity to perform higher-value work. 615 F.3d 233 at 247. 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. *Id.* at 247. Further, the State showed that over 90 percent of the NCDOT'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. *Id.* at 247. The Court pointed out that the Court in *Rothe II*, 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. *Id.* at 247.

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 fewer 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. 615 F.3d 233 at

247-248. The Court held that the very significant decline in utilization of minority and womensubcontractors – 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." *Id.* at 248, *citing Adarand v. Slater*, 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. *Id.* at 248.

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. 615 F.3d 233 at 248. 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, 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. Id. at 248. The Court found that nearly half of nonminority 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. 615 F.3d 233 at 248. In addition, the anecdotal evidence showed African American and Native American respondents believed that prime contractors sometimes dropped minority subcontractors after winning contracts. *Id.* at 248. The Court found that interview and focus-group responses echoed and underscored these reports. *Id.*

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. 615 F.3d 233 at 248-249. 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. *Id.* at 249.

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' narrative of an incident told from the witness' perspective and including the witness' perceptions." 615 F.3d 233 at 249, *quoting Concrete Works*, 321 F.3d at 989.

The Court held that anecdotal evidence simply supplements statistical evidence of discrimination. *Id.* at 249. 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. *Id.* at 249. It was noted that the samples of the minority groups were randomly selected. *Id.* The Court found the state had compelling anecdotal evidence that minority subcontractors face race-based obstacles to successful bidding. *Id.* at 249.

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." 615 F.3d 233 at 250. 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. *Id.* at 250. 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. *Id.* at 250.

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. 615 F.3d 233 at 250. 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. *Id*.

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. 615 F.3d 233 at 250. The Court then found that the State's anecdotal evidence of discrimination against these two groups sufficiently supplemented the State's statistical showing. *Id.* The survey in the study exposed an informal, racially exclusive network that systemically disadvantaged minority subcontractors. *Id.* at 251. 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. *Id.* The Court found the anecdotal evidence indicated that racial discrimination is a critical factor underlying the gross statistical disparities presented in the study. *Id.* at 251. 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. 615 F.3d 233 at 251-252.

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." 615 F.3d 233 at 252 quoting Grutter v. Bollinger, 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 252. 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 252.

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 USDOT in its regulations governing the Federal DBE Program. 615 F.3d 233 at 252, *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." 615 F.3d 233 at 252.

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. 615 F.3d 233 at 253. 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 253, 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. 615 F.3d 233 at 253. The Court found that the NCDOT had taken concrete steps to ensure that these goals accurately reflect the availability of minority-owned businesses on a project-by-project basis. *Id*.

Flexibility. The Court held that the Program was flexible and thus satisfied this indicator of narrow tailoring. 615 F.3d 233 at 253. 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. 615 F.3d 233 at 254. The State offered evidence from the study that prime contractors need not submit subcontract work that they can self-perform. *Id*.

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. 615 F.3d 233 at 254. 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. *Id*.

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. *Id.* at 254.

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. 615 F.3d 233 at 254. In other words, the Court concluded that prime contractors substantially overutilized women subcontractors on public road construction projects. Id. The Court found the public-sector evidence did not evince the "exceedingly persuasive justification" the Supreme Court requires. *Id.* at 255.

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. 615 F.3d 233 at 255. 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." *Id.* at 255. 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. *Id.* at 255. 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. *Id.* In addition, the Court found missing any

evidence prime contractors that discriminate against women subcontractors in the private sector nevertheless win public-sector contracts. *Id*.

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." 615 F.3d 233 at 255, n. 11. But, the Court held 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. *Id.* at 255, n. 11.

Moreover, the Court found the state failed to establish the amount of overlap between general construction and road construction subcontracting. 615 F.3d 233 at 256. 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. *Id.*

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. 615 F.3d 233 at 256. Further, the anecdotal evidence, the Court concluded, indicated that most women subcontractors do not experience discrimination. *Id.* 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. *Id.*

Holding. The Court held that the state legislature had crafted legislation that withstood the constitutional scrutiny. 615 F.3d 233 at 257. 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. Id. at 257. 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. 615 F.3d 233 at 258. 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. *Id.* The Court thus remanded the case to the district court to fashion an appropriate remedy consistent with the opinion. *Id.*

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. Jana-Rock Construction, Inc. v. New York State Dept. of Economic 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 USDOT 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. *Id.* Accordingly, Jana-Rock was denied MBE certification under the local program; Jana-Rock filed suit alleging a violation of the Equal Protection Clause. *Id.* 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. *Id.* 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." *Id.* 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 *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469 (1989) which required that affirmative action programs be no broader than necessary. *Id.* 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. *Id.* 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." *Id.* 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. *Id.* 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 *Rapid Test Products, Inc. v. Durham School Services Inc.*, 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.

4. Virdi v. DeKalb County School District, 135 Fed. Appx. 262, 2005 WL 138942 (11th Cir. 2005) (unpublished opinion)

Although it is an unpublished opinion, *Virdi v. DeKalb County School District* 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 *Virdi*, 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. *Id*.

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. *Id.* 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. *Id.*

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. *Id.*

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.

Id. The Report also recommended that the District adopt annual, aspirational participation goals for women- and minority-owned businesses. *Id.* The Report contained statements indicating the selection process should remain neutral and recommended that the Board adopt a non-discrimination statement. *Id.*

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. *Id.*

The Board also implemented the Minority Vendor Involvement Program (the "MVP") which adopted the participation goals set forth in the Report. *Id.* at 265.

The Board delegated the responsibility of selecting architects to the Superintendent. *Id.* Virdi sent a letter to the District in October 1991 expressing interest in obtaining architectural contracts. *Id.* Virdi sent the letter to the District Manager and sent follow-up literature; he recontacted the District Manager in 1992 and 1993. *Id.* In August 1994, Virdi sent a letter and a qualifications package to a project manager employed by Heery International. *Id.* 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.'" *Id.* 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. *Id.*

After a series of meetings with District officials, in 1997, Virdi met with the newly hired Executive Director. *Id.* 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). *Id.* Virdi then filed suit before any Phase III SPLOST projects were awarded. *Id.*

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. *Id.* at 267. The court first questioned whether the identified government interest was compelling. *Id.* 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. *Id.*

The court held the MVP was not narrowly tailored for two reasons. *Id.* 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." *Id.*, *citing Grutter v. Bollinger*, 539 U.S. 306, 339 (2003), and *Richmond v. J.A. Croson Co.*, 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. *Id.* at 268, n.8. Accordingly, the court held the MVP was not narrowly tailored. *Id.* at 268.

Second, the court held that the unlimited duration of the MVP's racial goals negated a finding of narrow tailoring. *Id.* "[R]ace conscious ... policies must be limited in time." *Id.*, *citing Grutter*, 539 U.S. at 342, and *Walker v. City of Mequite*, *TX*, 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. *Id.* 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. *Id.* 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. *Id.* at 269. Similarly, the court found that Virdi presented insufficient evidence to sustain his claims against the Superintendent for intentional discrimination. *Id.*

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. *Id.* at 270.

5. 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 *Concrete Works* 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 *Concrete Works*, 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. *Id*.

The City enacted an Ordinance No. 513 ("1990 Ordinance") containing annual goals for MBE/WBE utilization on all competitively bid projects. *Id.* at 956. A prime contractor could also satisfy the 1990 Ordinance requirements by using "good faith efforts." *Id.* 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 MBE/WBE 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. *Id.* 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. *Id.* at 957.

CWC filed suit challenging the constitutionality of the 1990 Ordinance. *Id*. The district court conducted a bench trial on the constitutionality of the three ordinances. *Id*. The district court ruled in favor of CWC and concluded that the ordinances violated the Fourteenth Amendment. *Id*. The City then appealed to the Tenth Circuit Court of Appeals. *Id*. The Court of Appeals reversed and remanded. *Id*. at 954.

The Court of Appeals applied strict scrutiny to race-based measures and intermediate scrutiny to the gender-based measures. *Id.* at 957-58, 959. The Court of Appeals also cited *Richmond v. J.A. Croson Co.*, 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. *Id.* at 958, *quoting Shaw v. Hunt*, 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. *Id.* 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." *Id.*, *quoting Croson*, 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. *Id*.

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. *Id.* 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." *Id.* (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." *Id.* (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. *Id.* 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." *Id.*, *quoting Miss. Univ. for Women v. Hogan*, 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. *Id.* Based on this information, the 1990 Study concluded that, despite Denver's efforts to increase MBE and WBE participation in Denver Public Works projects, some Denver employees and private contractors engaged in conduct designed to circumvent the goals program. *Id.* After reviewing the statistical and anecdotal evidence contained in the 1990 Study, the City Council enacted the 1990 Ordinance. *Id.*

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 women-owned 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. *Id.* 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 64 for MBEs and 70 for WBEs in the construction industry. In the professional design industry, disparity indices were 67 for MBEs and 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. *Id*.

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"). *Id.* 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." *Id.*

The 1997 Study compared MBE/WBE availability and utilization in the Colorado construction industry. *Id.* The statewide market was used because necessary information was unavailable for the Denver MSA. *Id.* 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: 41 for African American firms, 40 for Hispanic firms, 14 for Asian and other minorities, and 74 for women-owned firms. *Id.*

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. *Id.* 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. *Id*. Finally, the Study examined whether self-employed minorities and women in the construction industry have lower earnings than white males with similar characteristics. *Id*. 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. *Id*.

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 non-goals 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. *Id.* 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. *Id.* 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. *Id.*

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. *Id*.

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. *Id.* 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. *Id*.

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. *Id.* 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. *Id.* at 971. Thus, Denver's evidence did not suffer from the problem discussed by the court in *Croson*. 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 *Croson* 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." *Id.* at 971, *quoting Croson*, 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. *Id.*

The Court noted the Supreme Court has stated that the inference of discriminatory exclusion can arise from statistical disparities. *Id.*, *citing Croson*, 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. *Id.* 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. *Id*.

The court held the district court erroneously rejected the evidence Denver presented on marketplace discrimination. *Id.* 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 *Concrete Works II* and the plurality opinion in *Croson. Id.* 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." *Id., quoting Concrete Works II,* 36 F.3d at 1529 (emphasis added). In *Concrete Works II,* the court stated that "we do not read Croson as requiring the municipality to identify an exact linkage between its award of public contracts and private discrimination." *Id., quoting Concrete Works II,* 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. *Id.* at 973. Thus, Denver was not required to demonstrate that it is "guilty of prohibited discrimination" to meet its initial burden. *Id.*

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. *Id.* at 974, *quoting Concrete Works II*, 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. *Id.*

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 Adarand VII that evidence of both public and private discrimination in the construction industry is relevant. *Id., citing Adarand VII*, 228 F.3d at 1166-67).

The court held the conclusion reached by the majority in *Croson* that marketplace data are relevant in equal protection challenges to affirmative action programs was consistent with the approach later taken by the court in *Shaw v. Hunt. Id.* at 975. In *Shaw*, a majority of the court relied on the majority opinion in *Croson* 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." *Id.*, *quoting Shaw*, 517 U.S. at 909. The *Shaw* 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." *Id.* at 976, *quoting Shaw*, 517 U.S. at 910. The City can satisfy this condition by

identifying the discrimination, "'public or private, with some specificity.' " *Id.* at 976, *citing Shaw*, 517 U.S. at 910, *quoting Croson*, 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." *Id.* Thus, the court concluded *Shaw* specifically stated that evidence of either public or private discrimination could be used to satisfy the municipality's burden of producing strong evidence. *Id.* at 976.

In *Adarand VII*, 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. *Id.*, *citing Adarand VII*, 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." *Id.*, *quoting Concrete Works II*, 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. *Id.*, *quoting Concrete Works II*, 36 F.3d at 1530 (emphasis added).

Consistent with the court's mandate in *Concrete Works II*, 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." *Id*. 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. *Id.*, *quoting Croson*, 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 *Adarand VII*, 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." *Id.* at 977, *quoting Adarand VII*, 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. *Id.* 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." *Id.* at 977-78. In *Adarand VII*, the court concluded that this study, among other evidence, "strongly support[ed] an initial showing of discrimination in lending." *Id.* at 978, *quoting*, *Adarand VII*, 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 *Adarand VII* it took "judicial notice of the obvious causal connection between access to capital and ability to implement public works construction projects." *Id.* at 978, *quoting Adarand VII*, 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. *Id.* 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 *Adarand VII*. "[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." *Id.* at 979, *quoting Adarand VII*,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. *Id.* 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. *Id.* 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. *Id.* 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. *Id.*

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." *Id.* 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. *Id.* 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." *Id.* at 982-83. There was no contrary testimony that aggregation bias caused the disparities shown in Denver's studies. *Id.* 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. *Id.* 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. *Id.* 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. *Id.* at 984.

Consistent with the court's mandate in *Concrete Works II*, 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." *Id.* at 984, *quoting Concrete Works II*, 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. *Id.* 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. *Id.* 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. *Id.* 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. *Id.* 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. Id. 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. *Id.*

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. *Id*.

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. *Id.* at 989, *quoting Concrete Works III*, 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. *Id.* at 989-90, *citing Int'l Bhd. of Teamsters v. United States*, 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. Id. 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." *Id.* at 991, *quoting Concrete Works II*, 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." *Id.*, *quoting Adarand VII*, 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. *Id.* 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. *Id.* 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.

6. Kornhass Construction, Inc. v. State of Oklahoma, Department of 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. *Id.* 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 *Adarand Constructors, Inc. v. Slater*, 288 F.3d 1147 (10th Cir. 2000). The district court pointed out that in *Adarand VII*, the Tenth Circuit found compelling evidence of barriers to both minority business formation and existing minority businesses. *Id.* 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 Adarand VII*, 228 F.3d 1147, 1174.

Compelling state interest. The district court, following *Adarand VII*, 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. *Id.* 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. Id. 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. *Id.* 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. *Id.*

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." *Id.* 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." *Id.* In light of *Adarand VII*, 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. *Id.*

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. *Id.* 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. *Id.*

The court also found that the Intervenors' evidence did not indicate what discriminatory acts or practices allegedly occurred, or when they occurred. *Id.* The district court stated that the

Intervenors did not identify "a single qualified, minority-owned bidder who was excluded from a state contract." *Id.* 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. *Id.* 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." *Id.* 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. *Id.* at 1241 - 1242, footnote 11.

The district court also noted that the Sixth Circuit Court of Appeals in *Drabik* 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. *Id.* at 1242, footnote 12. The district court stated that, as in *Drabik*, 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. *Id.*

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 not 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 *Adarand VII* 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 under-inclusiveness. *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 *Adarand VII*

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 Adarand VII*, 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 *Adarand VII*, in the Supreme Court in the *Croson* 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 *all* 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. *Id.* at 1243, footnote 15 *citing Adarand VII*.

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. *Id.* 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. *Id.* Unlike the federal programs at issue in *Adarand VII*, 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. *Id.* The court found the MBE Act was not limited to those minority-owned businesses which are shown to be economically disadvantaged. *Id.*

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. *Id.* 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." *Id.* 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. *Id.* 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. *Id.* 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. *Id.* 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. *Id.*

The court stated that in *Adarand VII*, 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. *Id.* at 1246. The court noted that the government submitted evidence in *Adarand VII*, 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. *Id.* 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. *Id.* at 1246, *citing Adarand VII*, 228 F.3d at 1181.

Unlike *Adarand VII*, 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. *Id.* 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. *Id.* 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. *Id.*

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. *Id*.

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. *Id.* The court thus found that the factor of over-inclusiveness weighs against a finding that the MBE Act was narrowly tailored. *Id.*

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.

7. In re City of Memphis, 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 preenactment 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 statute 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.

8. Builders Ass'n of Greater Chicago v. County of Cook, Chicago, 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 *Builders Ass'n of Greater Chicago v. County of Cook, Chicago*, 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 VMI 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." *Id.* But, the court found "of that there is no evidence either." *Id.*

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. *Id.* Nor, the court stated, may it discriminate more than is necessary to cure the effects of the earlier discrimination. *Id.* "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." *Id.* The court, therefore, held that the ordinance was not "narrowly tailored" to the wrong that it seeks to correct. *Id.*

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" included groups that have never been subject to significant discrimination by Cook County. *Id.* 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. *Id.* 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.

9. Associated Gen. Contractors v. Drabik, 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 raceneutral 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 *Ritchie Produce*, 707 N.E.2d 871 (Ohio 1999) (upholding the Ohio State MBE Program).

10. 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.

11. Eng'g Contractors Ass'n of S. Florida v. Metro. Dade County, 122 F.3d 895 (11th Cir. 1997)

Engineering Contractors Association of South Florida v. Metropolitan Engineering Contractors Association 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 *Engineering Contractors Association*, 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). *Id.* The plaintiffs challenged the application of the program to County construction contracts. *Id.*

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. *Id.* 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. *Id.* The County Commission would make the final determination and its decision was appealable to the County Manager. *Id.* The County reviewed the efficacy of the MWBE programs annually, and reevaluated the continuing viability of the MWBE programs every five years. *Id.*

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. *Id.* 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." *Id.* 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. *Id.* 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. *Id.* 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. *Id.* 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 *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469 (1989). *Id.* 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." *Id.* 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." *Id.*, *citing Croson*, 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." *Id.* at 907, *citing Ensley Branch*, *NAACPv. Seibels*, 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." *Id.* (internal citations omitted).

Notwithstanding the "exceedingly persuasive justification" language utilized by the Supreme Court in *United States v. Virginia*, 116 S. Ct. 2264 (1996) (evaluating gender-based government action), the Eleventh Circuit held that the WBE program was subject to traditional intermediate scrutiny. *Id.* 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. *Id.* at 910.

The County provided two types of evidence in support of the MWBE programs: (1) statistical evidence, and (2) non-statistical "anecdotal" evidence. *Id.* 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). *Id.* 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." *Id.* at 912. A district court should not "speculate about what the data *might* have shown had the BBE program never been enacted." *Id.*

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. *Id.* In summary, the Eleventh Circuit held that the County's statistical evidence (described more fully below) was subject to more than one interpretation. *Id.* 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." Id. The district court's view of the evidence was a permissible one. *Id.*

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. *Id.* 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." *Id.* at 913. For the WBE statistics, the bidder/awardee statistics were "decidedly mixed" as across the range of County construction contracts. *Id.*

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.

Id. at 914. "The utility of disparity indices or similar measures ... has been recognized by a number of federal circuit courts." *Id.*

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." *Id.* 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." *Id.*, *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." *Id.*, *citing Concrete Works v. City & County of Denver*, 36 F.3d 1513, 1524 (10th Cir. 1994) (crediting disparity indices ranging from 0% to 3.8%); *Contractors Ass'n v. City of Philadelphia*, 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. *Id.* at 914. "The standard deviation figure describes the probability that the measured disparity is the result of mere chance." *Id.* 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." *Id.*

The statistics presented by the County indicated "statistically significant underutilization of BBEs in County construction contracting." *Id.* at 916. The results were "less dramatic" for HBEs and mixed as between favorable and unfavorable for WBEs. *Id.*

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." *Id.* (internal quotations and citations omitted). The Eleventh Circuit held that the plaintiffs produced "sufficient evidence to establish a neutral explanation for the disparities." *Id.*

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." *Id.* 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. *Id.* 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." *Id.*

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." *Id.* 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. *Id*.

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 anticipation of such an argument, the County conducted a regression analysis to control for firm size. *Id.* 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." *Id.* (internal citations omitted). The purpose of the regression analysis is "to determine whether the relationship between the two variables is statistically meaningful." *Id.*

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. *Id.* 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. *Id*. 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 than two). *Id*.

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. *Id.* 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. *Id.* The Eleventh Circuit held that this decision was not clearly erroneous. *Id.*

With respect to the BBE statistics, the regression analysis explained all but one negative disparity, for one type of construction contract between 1989-1991. *Id.* The Eleventh Circuit held the district court permissibly found that this did not constitute a "strong basis in evidence" of discrimination. *Id.*

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. *Id.* 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. *Id.* The Eleventh Circuit held the district court permissibly found that this did not constitute a "strong basis in evidence" of discrimination. *Id.*

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. *Id*. 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. *Id*. The Eleventh Circuit held the district court permissibly found that this evidence was not "sufficiently probative of discrimination." *Id*.

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. *Id.* 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." *Id.* 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. *Id.* 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." *Id.*

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. *Id.* 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.

Id. 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. *Id.*

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." *Id.* 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. *Id.* 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. *Id.* 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. *Id.* 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. *Id.*

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. *Id*. Although this factor did not render the study meaningless, the district court was entitled to consider that in evaluating the weight of the study. *Id*. 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." *Id.*, *quoting Croson*, 488 U.S. at 501, *quoting Hazelwood Sch. Dist. v. United States*, 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. *Id.* 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 *supra. Id.*

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). *Id.* 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." *Id.* "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." *Id.*

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). *Id.* 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. *Id.* The disparities for blacks and women (but not Hispanics) were substantial and statistically significant. *Id.* 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. *Id.*

The Eleventh Circuit held, in light of *Croson*, the district court need not have accepted this theory. *Id.* The Eleventh Circuit quoted *Croson*, 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." *Id.*, quoting *Croson*, 488 U.S. at 503. Following the Supreme Court in *Croson*, 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." *Id.*, quoting *Croson*, 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. *Id.* 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. *Id.* 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. *Id.*

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. *Id.* 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. *Id.* 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. *Id.*

The study indicated substantial disparities in 1977 and 1987 but not 1982. *Id.* 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. *Id.* However, the study made no attempt to filter for the Metrorail project and "complete[ly] fail[ed]" to account for firm size. *Id.* Accordingly, the Eleventh Circuit found the district court permissibly discounted the results of the Brimmer study. *Id.* 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. *Id.* 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." *Id.*

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. *Id.* 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. *Id.* They also testified that MBE/WBEs encounter difficulties in obtaining bonding and financing. *Id.*

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. *Id.* 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." *Id.*

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. *Id.* However, such anecdotal evidence is helpful "only when it [is] combined with and reinforced by sufficiently probative statistical evidence." *Id.* In her plurality opinion in *Croson*, 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." *Id.*, *quoting Croson*, 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." *Id.* at 925. The Eleventh Circuit also cited to opinions from the Third, Ninth and Tenth Circuits as supporting the same proposition. *Id.* 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." *Id.*

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." *Id., quoting Hayes v. North Side Law Enforcement Officers Ass'n*, 10 F.3d 207, 217 (4th Cir. 1993) and *citing Croson*, 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." *Id.* at 927, *citing Ensley Branch*, 31 F.3d at 1569. The four factors provide "a useful analytical structure." *Id.* 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." *Id.*

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." *Id.* 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. *Id.*

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. *Id.* 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. *Id.* 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." *Id.* 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. *Id*. "It follows that those firms should be helped the most by dismantling those barriers, something the County could do at least in substantial part." *Id*.

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 *Croson*:

[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.

Id., *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. *Id.* 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." *Id.*

The Eleventh Circuit found that the County had taken no steps to "inform, educate, discipline, or penalize" discriminatory misconduct by its own employees. *Id.* at 929. Nor had the County passed any local ordinances expressly prohibiting discrimination by local contractors, subcontractors, suppliers, bankers, or insurers. *Id.* "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. *Id.*

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. *Id.* However, because it did not rest upon a sufficient evidentiary foundation, the WBE program could not pass constitutional muster. *Id.*

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.

Recent District Court Decisions

12. H.B. Rowe Corp., Inc. v. W. Lyndo Tippett, North Carolina DOT, et al., 589 F. Supp.2d 587 (E.D.N.C. 2008), affirmed in part, reversed in part, and remanded, 615 F.3d 233 (4th Cir. 2010)

In *H.B. 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 MBE and WBE Program, which is a State of North Carolina "affirmative action" program administered by the NCDOT. The NCDOT MWBE Program challenged in *Rowe* involves projects funded solely by the State of North Carolina and not funded by the USDOT. 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 MBE and WBE 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).

NCDOT's MWBE Program "largely mirrors" the Federal 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 NCDOT's MWBE Program, the goals for minority and female participation are aspirational rather than mandatory. *Id*. An individual target for MBE participation was set for each project. *Id*.

Historically, NCDOT had engaged in several disparity studies. The most recent study was done in 2004. *Id.* 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 predesignated 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 Belk v. Charlotte-Mecklenburg Board of Education*, 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. *Id.* 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, which affirmed in part and reversed in part the decision of the district court. *See* 615 F3d 233 (4th Cir. 2010), discussed above.

13. 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, 130 S.Ct. 408 (2009).

In *Thomas v. City of Saint Paul*, 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 ("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. *Id.* 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. *Id.* 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. *Id.* at 963. Plaintiff Newell claimed he submitted numerous bids on the City's projects all of which were rejected. *Id.* The court found, however, that he provided no specifics about why he did not receive the work. *Id.*

The VOP. Under the VOP, the City sets annual bench marks or levels of participation for the targeted minorities groups. *Id.* at 963. The VOP prohibits quotas and imposes various "good

faith" requirements on prime contractors who bid for City projects. *Id.* 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. Id. The VOP further imposes obligations on the City with respect to vendor contracts. *Id.* The court found the City must seek where possible and lawful to award a portion of vendor contracts to VOP-certified businesses. *Id.* 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. *Id.* 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. *Id.*

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. *Id.* 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. *Id.* The court found they failed to show any instance in which their race was a determinant in the denial of any contract. *Id.* 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. *Id.* 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. *Id.* 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. *Id.* 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. *Id.*

The court stated that the plaintiffs must identify a discriminatory policy in effect. *Id.* 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. *Id.* 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. *Id.*

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. *Id.* Therefore, the court held plaintiffs had no standing to challenge the VOP. *Id.* at 966.

Plaintiff's 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. *Id.* at 967. The court held to establish a prima facie violation of the equal protection clause, there must be state action. *Id.* Plaintiffs must offer facts and evidence that constitute proof of "racially discriminatory intent or purpose." *Id.* 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. *Id.*

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. *Id*. 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. *Id*.

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 Eighth Circuit Court of Appeals affirmed the ruling of the district court. *Thomas v. City of Saint Paul*, 2009 WL 777932 (8th Cir. 2009) (unpublished opinion). The Eighth Circuit affirmed based on the decision of the district court and finding no reversible error.

14. Thompson Building Wrecking Co. v. Augusta, Georgia, 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 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. *Id.* 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 it did not utilize racial classifications because it only required vendors to make a "good faith effort" to ensure DBE participation. *Id.* 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." *Id.*

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 *Croson* and *Engineering Contractors Association* 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 *Croson*, the City would have a compelling interest in assuring that tax dollars would not perpetuate private prejudice. But, the court found (*citing* to *Croson*), 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 willing and able to work" may justify an affirmative action program. *Id.* at *7. The court also stated that anecdotal evidence is relevant to 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. *Id.* 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. *Id.* 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." *Id.* 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." *Id.* 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 *Adarand*, 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.

15. Hershell Gill Consulting Engineers, Inc. v. Miami-Dade County, 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 *Engineering Contractors Association*, 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"). *Id.* The MBE/WBE programs applied to A&E contracts in excess of \$25,000. *Id.* 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. *Id.* Once a contract was identified as covered by a participation goal, a review committee would determine whether a contract measure should be utilized. *Id.* 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. *Id.* at 1313. However, the district court found "the participation goals for the three MBE/WBE programs challenged … remained unchanged since 1994." *Id.*

In 1998, counsel for plaintiffs contacted the County Commissioners requesting the discontinuation of contract measures on A&E contracts. *Id.* 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." *Id.*

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." *Id.* Nonetheless, the Commissioners voted to continue the MBE/WBE participation goals at their previous levels. *Id.*

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.

Id. 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 *Gratz v. Bollinger*, 539 U.S. 244 (2003) and *Grutter v. Bollinger*, 539 U.S. 306 (2003). *Id.* 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 *Gratz* and *Grutter* did not alter the constitutional analysis as set forth in *Adarand* and *Croson. Id.* 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. *Id.* 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." *Id.* 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. *Id.* (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." *Id.*

The County presented both statistical and anecdotal evidence. *Id.* at 1318. The statistical evidence consisted of Dr. Carvajal's report, most of which consisted of "post-enactment" evidence. *Id.* 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. *Id.* 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. *Id.* 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. *Id*. For the architectural firms only, he also used a list of firms that had been issued an architecture professional license. *Id*.

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. *Id.* Dr. Carvajal conducted regression analyses "in order to determine the effect a firm owner's gender or race had on certain dependent variables." *Id.* 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. *Id.* 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." *Id.* Dr. Carvajal's results remained substantially unchanged. *Id.*

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." *Id*.

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. *Id.* 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. *Id.* 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." *Id.*

With respect to the marketplace data, the County conceded that there was insufficient evidence of discrimination against blacks to support the BBE program. *Id.* 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 survey was unreliable. *Id.* 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. *Id.* 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. *Id.* 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. *Id*.

The court quoted the Eleventh Circuit in *Engineering Contractors Association* for the proposition "that only in the rare case will anecdotal evidence suffice standing alone." *Id.* (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 *Engineering Contractors Association* where the County employees themselves testified. *Id.*

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. *Id.* 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. *Id.* 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." *Id.*

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. *Id.* 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. *Id.* Under either scenario, the HBE program could not be narrowly tailored. *Id.*

The court found the waiver provisions in the HBE program inflexible in practice. *Id.* 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. *Id.* 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." *Id.* at 1332, *citing Grutter*, 123 S. Ct. at 2346. For the foregoing reasons, the court concluded the HBE program was not narrowly tailored. *Id.* 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 program unable to satisfy the substantial relationship test. *Id.*

The court held that the County was liable for any compensatory damages. *Id.* 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. " *Id.* 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. *Id.* at 1338. Additionally, the Commissioners did not conduct the annual studies mandated by the MBE/WBE ordinance itself. *Id.* 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.

16. 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 "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." *Florida A.G.C. Council*, 303 F.Supp.2d at 1315, *quoting Eng'g Contractors Ass'n*, 122 F.3d at 928, *quoting Croson*, 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.

17. 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," not related 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 ethnic 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).

18. Associated Utility Contractors of Maryland, Inc. v. Mayor and City Council of Baltimore, 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.

19. 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.

20. Webster v. Fulton County, 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 *Engineering Contractors Association* 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.'" *Id.* at 1362-63. The court then set forth the strict scrutiny standard for evaluating racial and ethnic preferences and the four factors enunciated in Engineering Contractors Association, and the intermediate scrutiny standard for evaluating gender preferences. *Id.* at 1363. The court found that under Engineering Contractors Association, 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. *Id.*

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. *Id.* 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." *Id.*, *citing Eng'g Contractors Ass'n*, 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. *Id.* at 1368, *citing Eng'g Contractors Assoc.*, 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. *Id.* 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." *Id.* 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. *Id.* 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. *Id.* 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. *Id.*

The court next considered the County's post-1994 disparity study. *Id.* at 1371. The study first sought to determine the availability and utilization of minority- and female-owned firms. *Id.* 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.

Id. 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. *Id.* 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. *Id.* at 1375-76.

The plaintiff and the County submitted statistical studies of data collected between 1994 and 1997. *Id.* at 1376. The court found that the data were potentially skewed due to the operation of the M/FBE program. *Id.* 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). *Id.* (internal citations omitted).

The court considered the County's anecdotal evidence, and quoted *Engineering Contractors Association* 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." *Id.*, *quoting Eng'g Contractors Ass'n*, 122 F.3d at 907. The Brimmer-Marshall Study contained anecdotal evidence. *Id.* 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. *Id.* The court found the most common complaints concerned barriers in bonding, financing, and insurance and slow payment by prime contractors. *Id.* The court concluded that the anecdotal evidence was insufficient in and of itself to establish a firm basis for the M/FBE program. *Id.*

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." *Id.* at 1380, *citing Eng'g Contractors Assoc.*, 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." *Id.*, *quoting Eng'g Contractors Ass'n*, 122 F.3d at 927. The court found that there was no evidence of discrimination by the County. *Id.* 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. *Id.* 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. *Id.* 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. *Id.* at 1381. The court concluded that because the M/FBE program was not adopted as a last resort, it failed the narrow tailoring test. *Id.*

Additionally, the court found that there was no substantial relationship between the numerical goals and the relevant market. *Id.* The court rejected the County's argument that its program was permissible because it set "goals" as opposed to "quotas," because the program in *Engineering Contractors Association* also utilized "goals" and was struck down. *Id.*

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. *Id.* 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. *Id.*

The court found the County's M/FBE program unconstitutional and entered a permanent injunction in favor of the plaintiff. *Id.* On appeal, the Eleventh Circuit affirmed per curiam, stating only that it affirmed on the basis of the district court's opinion. *Webster v. Fulton County, Georgia*, 218 F.3d 1267 (11th Cir. 2000).

21. Associated Gen. Contractors v. Drabik, 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 *F. Buddie Contracting v. Cuyahoga Community College*, 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 *Ritchey Produce*, 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.

22. *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.

G. Recent Decisions and Authorities Involving Federal Procurement That May Impact DBE and MBE/WBE Programs

1. Rothe Development Corp. v. U.S. Department of Defense, et al., 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 Department of Defense ("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 *Concrete Works, Adarand Constructors, Sherbrooke Turf* and *Western States Paving* (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. 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 *Adarand VII* (2000), *Sherbrooke Turf* (2003), and *Western States Paving* (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. *Rothe* 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 *Adarand VII*, *Sherbrooke Turf*, and *Western States Paving*, also relied on it in support of their compelling interest holding. *Id.* 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. *Id.* at 829-32.

Based on *Concrete Works IV*, 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. *Id.* 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 were 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 those data are 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 USDOT MBE [now DBE] Program, and rejected five years as a bright-line rule for considering whether data are "stale." *Id.* 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 of whether the federal government has a compelling interest to take remedial

action in its own procurement activities." *Id.* at 839, *quoting 61 Fed.Reg.* 26042-01, 26061 (1996).

The district court also discussed additional evidence before Congress that it found in Congressional Committee Reports and Hearing Records. *Id.* at 865-71. The court noted SBA Reports that were before Congress prior to the 2006 Reauthorization. *Id.* at 871.

The district court found that the data contained in the Appendix, the Benchmark Study, and the Urban Institute Report were "stale," and the court did not consider those reports as evidence of a compelling interest for the 2006 Reauthorization. *Id.* 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 *Sherbrooke Turf, Adarand VII*, and *Western States Paving. Id.* 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 these 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. *Id.* at 874.

Although the 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 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. *Id.* 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. *Id.* 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. *Id.* 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. *Id.*

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 DOD and the Department of Air Force had become passive participants in perpetuating it. *Id.* The court stated it was law of the case and could not be disturbed on remand that the Federal Circuit in *Rothe III* 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. *Id.*, *quoting Rothe III*, 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
- Over- and under-inclusiveness.

Id. 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 federal procurement. Id. 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. Id. 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. Id. at 880. Rather, the court found that narrow tailoring requires only "serious, good faith consideration of workable race-neutral alternatives." Id.

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. *Id.* at 881. The court concluded that the 5 percent goal was aspirational, not mandatory. *Id.* 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 DOD 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 DOD was a passive participant in pervasive, nationwide racial discrimination — at least not on the evidence produced by the DOD 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 *Croson*, 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 Croson*, 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, race-neutral 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 DOD 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 differenceor disparity- between the number of contracts or contract dollars actually awarded minorityowned 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 are 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 were 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. *Id*.

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 DOD "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 DOD 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 DOD, 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 *Croson* 'strong basis in evidence' benchmark.'" 545 F.3d at 1049, *quoting W.H. Scott Constr. Co.*, 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.

2. DynaLantic Corp. v. United States Dept. of Defense, et al., 503 F. Supp.2d 262 (D.D.C. 2007)

DynaLantic Corp. involves a challenge to the DOD's utilization of the Small Business Administration's ("SBA") 8(a) Business Development Program ("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. *Id.* 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. *Id.* 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. *Id.* 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. *Id.* 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 *Western States Paving* in support of this proposition. *Id.* 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 *Rothe* 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. *Id.* at 267.

3. DynaLantic Corp. v. United States Dept. of Defense, et al., ___ F.Supp.2d ____, 2012 WL 3356813 (D.D.C. Aug. 15, 2012)

Plaintiff, the DynaLantic Corporation ("DynaLantic"), is a small business that designs and manufactures aircraft, submarine, ship, and other simulators and training equipment. DynaLantic sued the United States Department of Defense ("DoD"), the Department of the Navy, and the Small Business Administration ("SBA") challenging the constitutionality of Section 8(a) of the Small Business Act (the "Section 8(a) program"), on its face and as applied: namely, the SBA's determination that it is necessary or appropriate to set aside contracts in the military simulation and training industry. 2012 WL 3356813, at *1, *37. The Section 8(a) program authorizes the federal government to limit the issuance of certain contracts to socially and economically disadvantaged businesses. *Id.* at *1. DynaLantic claimed that the Section 8(a) is unconstitutional on its face because the DoD's use of the program, which is reserved for "socially and economically disadvantaged individuals," constitutes an illegal racial preference in violation of the equal protection in violating its right to equal protection under the Due Process Clause of the Fifth Amendment to the Constitution and other rights. *Id.* at *1. DynaLantic also claimed the

Section 8(a) program is unconstitutional as applied by the federal defendants in DynaLantic's specific industry, defined as the military simulation and training industry. *Id*.

As described in *DynaLantic Corp. v. United States Department of Defense*, 503 F.Supp. 2d 262 (D.D.C. 2007), the court previously had denied Motions for Summary Judgment by the parties and directed them to propose future proceedings in order to supplement the record with additional evidence subsequent to 2007 before Congress. 503 F.Supp. 2d at 267.

The Section 8(a) Program. The Section 8(a) program is a business development program for small businesses owned by individuals who are both socially and economically disadvantaged as defined by the specific criteria set forth in the congressional statute and federal regulations at 15 U.S.C. §§ 632, 636 and 637; see 13 C.F.R. § 124. "Socially disadvantaged" individuals are persons who have been "subjected to racial or ethnic prejudice or cultural bias within American society because of their identities as members of groups without regard to their individual qualities." 13 C.F.R. § 124.103(a); see also 15 U.S.C. § 637(a)(5). "Economically disadvantaged" individuals are those socially disadvantaged individuals "whose ability to compete in the free enterprise system has been impaired due to diminished capital and credit opportunities as compared to others in the same or similar line of business who are not socially disadvantaged." 13 C.F.R. § 124.104(a); see also 15 U.S.C. § 637(a)(6)(A). DynaLantic Corp., 2012WL 3356813 at *2.

Individuals who are members of certain racial and ethnic groups are presumptively socially disadvantaged, such groups include, but are not limited to, Black Americans, Hispanic Americans, Native Americans, Indian tribes, Asian Pacific Americans, Native Hawaiian Organizations, and other minorities. *Id.* at *2 quoting 15 U.S.C. § 631(f)(1)(B)-(c); see also 13 C.F.R. § 124.103(b)(1). All prospective program participants must show that they are economically disadvantaged, which requires an individual to show a net worth of less than \$250,000 upon entering the program, and a showing that the individual's income for three years prior to the application and the fair market value of all assets do not exceed a certain threshold. 2012 WL 3356813 at *3; see 13 C.F.R. § 124.104(c)(2).

Congress has established an "aspirational goal" for procurement from socially and economically disadvantaged individuals, which includes but is not limited to the Section 8(a) program, of five percent of procurements dollars government wide. See 15 U.S.C. § 644(g)(1). DynaLantic, at *3. Congress has not, however, established a numerical goal for procurement from the Section 8(a) program specifically. See Id. Each federal agency establishes its own goal by agreement between the agency head and the SBA. Id. DoD has established a goal of awarding approximately two percent of prime contract dollars through the Section 8(a) program. DynaLantic, at *3. The Section 8(a) program allows the SBA, "whenever it determines such action is necessary and appropriate," to enter into contracts with other government agencies and then subcontract with qualified program participants. 15 U.S.C. § 637(a)(1). Section 8(a) contracts can be awarded on a "sole source" basis (i.e., reserved to one firm) or on a "competitive" basis (i.e., between two or more Section 8(a) firms). DynaLantic, at *3-4; 13 C.F.R. 124.501(b).

Plaintiff's Business and the Simulation and Training Industry. DynaLantic performs contracts and subcontracts in the simulation and training industry. The simulation and training industry

is composed of those organizations that develop, manufacture, and acquire equipment used to train personnel in any activity where there is a human-machine interface. *DynaLantic at *5.*

Compelling Interest. The Court rules that the government must make two showings to articulate a compelling interest served by the legislative enactment to satisfy the strict scrutiny standard that racial classifications are constitutional only if they are narrowly tailored measures that further compelling governmental interests." DynaLantic, at *9. First, the government must "articulate a legislative goal that is properly considered a compelling government interest." *Id. quoting Sherbrooke Turf v. Minn. DOT.*, 345 F.3d 964, 969 (8th Cir.2003). Second, in addition to identifying a compelling government interest, "the government must demonstrate 'a strong basis in evidence' supporting its conclusion that race-based remedial action was necessary to further that interest." *DynaLantic*, at *9, *quoting Sherbrooke*, 345 F.3d 969.

After the government makes an initial showing, the burden shifts to DynaLantic to present "credible, particularized evidence" to rebut the government's "initial showing of a compelling interest." *DynaLantic*, at *10 quoting *Concrete Works of Colorado, Inc. v. City and County of Denver*, 321 F.3d 950, 959 (10th Cir. 2003). The court points out that although Congress is entitled to no deference in its ultimate conclusion that race-conscious action is warranted, its fact-finding process is generally entitled to a presumption of regularity and deferential review. *DynaLantic*, at *10, citing *Rothe Dev. Corp. v. U.S. Dep't of Def.* ("*Rothe III*"), 262 F.3d 1306, 1321 n. 14 (Fed. Cir. 2001).

The court held that the federal Defendants state a compelling purpose in seeking to remediate either public discrimination or private discrimination in which the government has been a "passive participant." *DynaLantic, at *11.* The Court rejected *DynaLantic's* argument that the federal Defendants could only seek to remedy discrimination by a governmental entity, or discrimination by private individuals directly using government funds to discriminate. *DynaLantic,* at *11. The Court held that it is well established that the federal government has a compelling interest in ensuring that its funding is not distributed in a manner that perpetuates the effect of either public or private discrimination within an industry in which it provides funding. *DynaLantic, at *11, citing Western States Paving v. Washington State DOT, 407 F.3d 983, 991 (9th Cir. 2005).*

The Court noted that any public entity, state or federal, has a compelling interest in assuring that public dollars, drawn from the tax dollars of all citizens, do not serve to finance the evils of private prejudice, and such private prejudice may take the form of discriminatory barriers to the formation of qualified minority businesses, precluding from the outset competition for public contracts by minority enterprises. *DynaLantic* at *11 *quoting City of Richmond v. J. A. Croson Co.,* 488 U.S. 469, 492 (1995), and Adarand Constructors, Inc. v. Slater, 228 F.3d 1147, 1167-68 (10th Cir. 2000). In addition, private prejudice may also take the form of "discriminatory barriers" to "fair competition between minority and non-minority enterprises ... precluding existing minority firms from effectively competing for public construction contracts." *DynaLantic, at *11, quoting Adarand VII,* 228 F.3d at 1168.

Thus, the Court concluded that the government may implement race-conscious programs not only for the purpose of correcting its own discrimination, but also to prevent itself from acting

as a "passive participant" in private discrimination in the relevant industries or markets. *DynaLantic,* at *11, *citing Concrete Works IV,* 321 F.3d at 958.

Evidence before Congress. The Court analyzed the legislative history of the Section 8(a) program, and then addressed the issue as to whether the Court is limited to the evidence before Congress when it enacted Section 8(a) in 1978 and revised it in 1988, or whether it could consider post-enactment evidence. *DynaLantic*, at *16-17. The Court found that nearly every circuit court to consider the question has held that reviewing courts may consider post-enactment evidence in addition to evidence that was before Congress when it embarked on the program. *DynaLantic*, at *17. The Court noted that post-enactment evidence is particularly relevant when the statute is over thirty years old, and evidence used to justify Section 8(a) is stale for purposes of determining a compelling interest in the present. *Id*. The Court then followed the 10th Circuit Court of Appeals' approach in *Adarand VII*, and reviewed the post-enactment evidence in three broad categories: (1) evidence of barriers to the formation of qualified minority contractors due to discrimination, (2) evidence of discriminatory barriers to fair competition between minority and non-minority contractors, and (3) evidence of discrimination in state and local disparity studies. *DynaLantic*, at *17.

The Court found that the government presented sufficient evidence of barriers to minority business formation, including evidence on race-based denial of access to capital and credit, lending discrimination, routine exclusion of minorities from critical business relationships, particularly through closed or "old boy" business networks that make it especially difficult for minority-owned businesses to obtain work, and that minorities continue to experience barriers to business networks. *DynaLantic*, at *17-21. The Court considered as part of the evidentiary basis before Congress multiple disparity studies conducted throughout the United States and submitted to Congress, and qualitative and quantitative testimony submitted at Congressional hearings. *Id*.

The Court also found that the government submitted substantial evidence of barriers to minority business development, including evidence of discrimination by prime contractors, private sector customers, suppliers, and bonding companies. *DynaLantic*, at *21-23. The Court again based this finding on recent evidence submitted before Congress in the form of disparity studies, reports and Congressional hearings. *Id*.

State and Local Disparity Studies. Although the Court noted there have been hundreds of disparity studies placed before Congress, the Court considers in particular studies submitted by the federal Defendants of 50 disparity studies, encompassing evidence from 28 states and the District of Columbia, which have been before Congress since 2006. *DynaLantic*, at *25-29. The Court stated it reviewed the studies with a focus on two indicators that other courts have found relevant in analyzing disparity studies. First, the Court considered the disparity indices calculated, which was a disparity index, calculated by dividing the percentage of MBE, WBE, and/or DBE firms *utilized* in the contracting market by the percentage of M/W/DBE firms *available* in the same market. *DynaLantic*, at *26. The Court said that normally, a disparity index of 100 demonstrates full M/W/DBE participation; the closer the index is to zero, the greater the M/W/DBE disparity due to underutilization. *DynaLantic*, at *26.

Second, the Court reviewed the method by which studies calculated the *availability* and *capacity* of minority firms. *DynaLantic*, at *26. The Court noted that some courts have looked closely at these factors to evaluate the reliability of the disparity indices, reasoning that the indices are not probative unless they are restricted to firms of significant size and with significant government contracting experience. *DynaLantic*, at *26. The Court pointed out that although discriminatory barriers to formation and development would impact capacity, the Supreme Court decision in *Croson* and the Court of Appeals decision in *O'Donnell Construction Co. v. District of Columbia*, *et al.*, 963 F.2d 420 (D.C. Cir. 1992) "require the additional showing that eligible minority firms experience disparities, notwithstanding their abilities, in order to give rise to an inference of discrimination." *DynaLantic*, at *26, n. 10.

Analysis: Strong Basis in Evidence. Based on an analysis of the disparity studies and other evidence, the Court concluded that the government articulated a compelling interest for the Section 8(a) program and satisfied its initial burden establishing that Congress had a strong basis in evidence permitting race-conscious measures to be used under the Section 8(a) program. *DynaLantic*, at *29-37. The Court held that DynaLantic did not meet its burden to establish that the Section 8(a) program is unconstitutional on its face, finding that DynaLantic could not show that Congress did not have a strong basis in evidence for permitting race-conscious measures to be used under any circumstances, in any sector or industry in the economy. *DynaLantic*, at *29.

The Court discussed and analyzed the evidence before Congress, which included extensive statistical analysis, qualitative and quantitative consideration of the unique challenges facing minorities from all businesses, and an examination of their race-neutral measures that have been enacted by previous Congresses, but had failed to reach the minority owned firms. *DynaLantic*, at *31. The Court said Congress had spent decades compiling evidence of race discrimination in a variety of industries, including but not limited to construction. *DynaLantic*, at *31. The Court also found that the federal government produced significant evidence related to professional services, architecture and engineering, and other industries. *DynaLantic*, at *31. The Court stated that the government has therefore "established that there are at least some circumstances where it would be 'necessary or appropriate' for the SBA to award contracts to businesses under the Section 8(a) program. *DynaLantic*, at *31, *citing* 15 U.S.C. § 637(a)(1).

Therefore, the Court concluded that in response to Plaintiff's facial challenge, the government met its initial burden to present a strong basis in evidence sufficient to support its articulated, constitutionally valid, compelling interest. *DynaLantic*, at *31. The Court also found that the evidence from around the country is sufficient for Congress to authorize a nationwide remedy. *DynaLantic*, at *31, n. 13.

Rejection of DynaLantic's Rebuttal Arguments. The Court held that since the federal Defendants made the initial showing of a compelling interest, the burden shifted to the Plaintiff to show why the evidence relied on by Defendants fails to demonstrate a compelling governmental interest. *DynaLantic*, at *32. The Court rejected each of the challenges by DynaLantic, including holding that: the legislative history is sufficient; the government compiled substantial evidence that identified private racial discrimination which affected minority utilization in specific industries of government contracting, both before and after the enactment of the Section 8(a) program; any flaws in the evidence, including the disparity studies,

DynaLantic has identified in the data do not rise to the level of credible, particularized evidence necessary to rebut the government's initial showing of a compelling interest; DynaLantic cited no authority in support of its claim that fraud in the administration of race-conscious programs is sufficient to invalidate Section 8(a) program on its face; and Congress had strong evidence that the discrimination is sufficiently pervasive across racial lines to justify granting a preference for all five groups included in Section 8(a). *DynaLantic*, at *32-36.

In this connection, the Court stated it agreed with *Croson* and its progeny that the government may properly be deemed a "passive participant" when it fails to adjust its procurement practices to account for the effects of identified private discrimination on the availability and utilization of minority-owned businesses in government contracting. *DynaLantic*, at *34. In terms of flaws in the evidence, the Court pointed out that the proponent of the race-conscious remedial program is not required to unequivocally establish the existence of discrimination, nor is it required to negate all evidence of non-discrimination. *DynaLantic*, at *35, *citing Concrete Work IV*, 321 F.3d at 991. Rather, a strong basis in evidence exists, the Court stated, when there is evidence approaching a *prima facie* case of a constitutional or statutory violation, not irrefutable or definitive proof of discrimination. *Id*, *citing Croson*, 488 U.S. 500. Accordingly, the Court stated that DynaLantic's claim that the government must independently verify the evidence presented to it is unavailing. *Id*. *DynaLantic*, at *35.

Also in terms of DynaLantic's arguments about flaws in the evidence, the Court noted that Defendants placed in the record approximately 50 disparity studies which had been introduced or discussed in Congressional Hearings since 2006, which DynaLantic did not rebut or even discuss any of the studies individually. *DynaLantic*, at *35. DynaLantic asserted generally that the studies did not control for the capacity of the firms at issue, and were therefore unreliable. *Id.* The Court pointed out that Congress need not have evidence of discrimination in all 50 states to demonstrate a compelling interest, and that in this case, the federal Defendants presented recent evidence of discrimination in a significant number of states and localities which, taken together, represents a broad cross-section of the nation. *DynaLantic*, at *35, n. 15. The Court stated that while not all of the disparity studies accounted for the capacity of the firms, many of them did control for capacity and still found significant disparities between minority and non-minority owned firms. *DynaLantic*, at *35. In short, the Court found that DynaLantic's "general criticism" of the multitude of disparity studies does not constitute particular evidence undermining the reliability of the particular disparity studies and therefore is of little persuasive value. *DynaLantic*, at *35.

In terms of the argument by DynaLantic as to requiring proof of evidence of discrimination against each minority group, the Court stated that Congress has a strong basis in evidence if it finds evidence of discrimination is sufficiently pervasive across racial lines to justify granting a preference to all five disadvantaged groups included in Section 8(a). The Court found Congress had strong evidence that the discrimination is sufficiently pervasive across racial lines to justify a preference to all five groups. *DynaLantic*, at *36. The fact that specific evidence varies, to some extent, within and between minority groups, was not a basis to declare this statute facially invalid. *DynaLantic*, at *36.

Facial Challenge: Conclusion. The Court concluded Congress had a compelling interest in eliminating the roots of racial discrimination in federal contracting and had established a strong

basis of evidence to support its conclusion that remedial action was necessary to remedy that discrimination by providing significant evidence in three different area. First, it provided extensive evidence of discriminatory barriers to minority business formation. *DynaLantic*, at *37. Second, it provided "forceful" evidence of discriminatory barriers to minority business development. *Id*. Third, it provided significant evidence that, even when minority businesses are qualified and eligible to perform contracts in both the public and private sectors, they are awarded these contracts far less often than their similarly situated non-minority counterparts. *Id*. The Court found the evidence was particularly strong, nationwide, in the construction industry, and that there was substantial evidence of widespread disparities in other industries such as architecture and engineering, and professional services. *Id*.

As-Applied Challenge. *DynaLantic* also challenged the SBA and DoD's use of the Section 8(a) program as applied: namely, the agencies' determination that it is necessary or appropriate to set aside contracts in the military simulation and training industry. *DynaLantic*, at *37. Significantly, the Court points out that the federal Defendants "concede that they do not have evidence of discrimination in this industry." *Id.* Moreover, the Court points out that the federal Defendants admitted that there "is no Congressional report, hearing or finding that references, discusses or mentions the simulation and training industry." *DynaLantic*, at *38. The federal Defendants also admit that they are "unaware of any discrimination in the simulation and training industry." *Id.* In addition, the federal Defendants admit that none of the documents they have submitted as justification for the Section 8(a) program mentions or identifies instances of past or present discrimination in the simulation and training industry. *DynaLantic*, at *38.

The federal Defendants maintain that the government need not tie evidence of discriminatory barriers to minority business formation and development to evidence of discrimination in any particular industry. *DynaLantic*, at *38. The Court concludes that the federal Defendants' position is irreconcilable with binding authority upon the Court, specifically, the United States Supreme Court's decision in *Croson*, as well as the Federal Circuit's decision in *O'Donnell Construction Company*, which adopted *Croson's* reasoning. *DynaLantic*, at *38. The Court holds that *Croson* made clear the government must provide evidence demonstrating there were eligible minorities in the relevant market. *DynaLantic*, at *38. The Court held that absent an evidentiary showing that, in a highly skilled industry such as the military simulation and training industry, there are eligible minorities who are qualified to undertake particular tasks and are nevertheless denied the opportunity to thrive there, the government cannot comply with *Croson's* evidentiary requirement to show an inference of discrimination. *DynaLantic*, at *39, *citing Croson*, 488 U.S. 501. The Court rejects the federal government's position that it does not have to make an industry-based showing in order to show strong evidence of discrimination. *DynaLantic*, at *40.

The Court notes that the Department of Justice has recognized that the federal government must take an industry-based approach to demonstrating compelling interest. *DynaLantic*, at *40, *citing Cortez III Service Corp. v. National Aeronautics & Space Administration*, 950 F.Supp. 357 (D.D.C. 1996). In *Cortez*, the Court found the Section 8(a) program constitutional on its face, but found the program unconstitutional as applied to the NASA contract at issue because the government had provided no evidence of discrimination in the industry in which the NASA contract would be performed. *DynaLantic*, at *40. The Court pointed out that the Department of Justice had advised federal agencies to make industry-specific determinations before offering

set-aside contracts and specifically cautioned them that without such particularized evidence, set-aside programs may not survive *Croson* and *Adarand*. *DynaLantic*, at *40.

The Court recognized that legislation considered in *Croson, Adarand* and *O'Donnell* were all restricted to one industry, whereas this case presents a different factual scenario, because Section 8(a) is not industry-specific. *DynaLantic*, at *40, n. 17. The Court noted that the government did not propose an alternative framework to *Croson* within which the Court can analyze the evidence, and that in fact, the evidence the government presented in the case is industry specific. *Id*.

The Court concluded that agencies have a responsibility to decide if there has been a history of discrimination in the particular industry at issue. *DynaLantic*, at *40. According to the Court, it need not take a party's definition of "industry" at face value, and may determine the appropriate industry to consider is broader or narrower than that proposed by the parties. *Id.* However, the Court stated, in this case the government did not argue with Plaintiff's industry definition, and more significantly, it provided no evidence whatsoever from which an inference of discrimination in that industry could be made. *DynaLantic*, at *40.

Narrowly Tailoring. In addition to showing strong evidence that a race-conscious program serves a compelling interest, the government is required to show that the means chosen to accomplish the government's asserted purpose are specifically and narrowly framed to accomplish that purpose. *DynaLantic*, at *41. The Court considered several factors in the narrowly tailoring analysis: the efficacy of alternative, race-neutral remedies, flexibility, over- or under-inclusiveness of the program, duration, the relationship between numerical goals and the relevant labor market, and the impact of the remedy on third parties. *Id*.

The Court analyzed each of these factors and found that the federal government satisfied all six factors. *DynaLantic*, at *41-48. The Court found that the federal government presented sufficient evidence that Congress attempted to use race-neutral measures to foster and assist minority owned businesses relating to the race-conscious component in Section 8(a), and that these race-neutral measures failed to remedy the effects of discrimination on minority small business owners. *DynaLantic*, at *42. The Court found that the Section 8(a) program is sufficiently flexible in granting race-conscious relief because race is made relevant in the program, but it is not a determinative factor or a rigid racial quota system. *DynaLantic*, at *43. The Court noted that the Section 8(a) program contains a waiver provision and that the SBA will not accept a procurement for award as an 8(a) contract if it determines that acceptance of the procurement would have an adverse impact on small businesses operating outside the Section 8(a) program. *DynaLantic*, at *44.

The Court found that the Section 8(a) program was not over- and under-inclusive because the government had strong evidence of discrimination which is sufficiently pervasive across racial lines to all five disadvantaged groups, and Section 8(a) does not provide that every member of a minority group is disadvantaged. *DynaLantic*, at *44. In addition, the program is narrowly tailored because it is based not only on social disadvantage, but also on an individualized inquiry into economic disadvantage, and that a firm owned by a non-minority may qualify as socially and economically disadvantaged. *DynaLantic*, at *44.

The Court also found that the Section 8(a) program places a number of strict durational limits on a particular firm's participation in the program, places temporal limits on every individual's participation in the program, and that a participant's eligibility is continually reassessed and must be maintained throughout its program term. *DynaLantic*, at *45. Section 8(a)'s inherent time limit and graduation provisions ensure that it is carefully designed to endure only until the discriminatory impact has been eliminated, and thus it is narrowly tailored. *DynaLantic*, at *46.

In light of the government's evidence, the Court concluded that the aspirational goals at issue, all of which were less than five percent of contract dollars, are facially constitutional. *DynaLantic*, at *46-47. The evidence, the Court noted, established that minority firms are ready, willing, and able to perform work equal to two to five percent of government contracts in industries including but not limited to construction. *Id*. The Court found the effects of past discrimination have excluded minorities from forming and growing businesses, and the number of available minority contractors reflects that discrimination. *DynaLantic*, at *47.

Finally, the Court found that the Section 8(a) program takes appropriate steps to minimize the burden on third parties, and that the Section 8(a) program is narrowly tailored on its face. *DynaLantic*, at *48. The Court concluded that the government is not required to eliminate the burden on non-minorities in order to survive strict scrutiny, but a limited and properly tailored remedy to cure the effects of prior discrimination is permissible even when it burdens third parties. *Id*. The Court points to a number of provisions designed to minimize the burden on non-minority firms, including the presumption that a minority applicant is socially disadvantaged may be rebutted, an individual who is not presumptively disadvantaged may qualify for such status, the 8(a) program requires an individualized determination of economic disadvantage, and it is not open to individuals whose net worth exceeds \$250,000 regardless of race. *Id*.

Conclusion. The Court concluded that the Section 8(a) program is constitutional on its face. The Court also held that it is unable to conclude that the federal Defendants have produced evidence of discrimination in the military simulation and training industry sufficient to demonstrate a compelling interest. Therefore, *DynaLantic* prevailed on its as-applied challenge. *DynaLantic*, at *51. Accordingly, the Court granted the federal Defendants' Motion for Summary Judgment in part (holding the Section 8(a) program is valid on its face) and denied it in part, and granted the Plaintiff's Motion for Summary Judgment in part (holding the program is invalid as applied to the military simulation and training industry) and denied it in part. The Court held that the SBA and the DoD are enjoined from awarding procurements for military simulators under the Section 8(a) program without first articulating a strong basis in evidence for doing so.

4. "Federal Procurement After Adarand" (USCCR Report September, 2005)

In September of 2005, the United States Commission on Civil Rights ("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, *citing Adarand*, 515 U.S. at 237-38. The following is a brief summary of the report.

In 1995, the United States Supreme Court decided *Adarand Constructors, Inc. v. Pena,* 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 *Adarand* 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 Adarand. Accordingly, the study considered the following questions:

- Do agencies seriously consider workable race-neutral alternatives, as required by *Adarand*?
- 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 race-neutral 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 *Adarand* 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 *Adarand* 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 race-neutral 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. 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.

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APPENDIX C. General Approach to Utilization Analysis

The utilization analysis examined the percentage of contract dollars that went to minority- and women-owned business enterprises (MBE/WBEs) on transportation-related construction and engineering contracts that the Washington State Department of Transportation (WSDOT) and local agencies awarded during the study period. The study team included the participation of *all* MBE/WBES in its calculations of MBE/WBE utilization, regardless of whether they were certified as Disadvantaged Business Enterprises (DBEs), MBE, or WBEs through the Washington State Office of Minority and Women's Business Enterprises (OMWBE). The study team also calculated the utilization of non-Hispanic white male-owned businesses (i.e., majority-owned businesses).

The study team compiled and analyzed the most comprehensive set of data that were available on prime contracts and subcontracts that WSDOT awarded during the study period. BBC sought sources of WSDOT contract and vendor data that consistently included information about prime contractors and subcontractors, regardless of ownership or DBE certification status. The study team analyzed both United States Department of Transportation (USDOT)-funded and statefunded construction and engineering contracts as part of the utilization analysis.

Appendix D describes the study team's utilization data collection and review processes in four parts:

- A. Collection of WSDOT contract data:
- B. Collection of vendor information;
- C. Collection of WSDOT bid and proposal data; and
- D. WSDOT review.

A. Collection of WSDOT Contract Data

The study team collected contract data on transportation-related construction and engineering contracts that WSDOT awarded during the study period (federal fiscal years 2009, 2010, and 2011). The study team also collected data related to contracts that the Highways and Local Programs division (H&LP) administered through Local Programs.

Construction contracts. BBC collected data on transportation-related construction prime contracts — and associated subcontracts — that WSDOT awarded during two time periods: between October 1, 2008 and September 30, 2011; and between May 9, 2005 and September 30, 2006. The latter time period corresponded to the time when WSDOT suspended the use of DBE contracting goals on construction contracts.

 $^{^1}$ WSDOT DBE utilization reports alone were not sufficient for this analysis as WSDOT does not record information about non-DBE subcontractors in those reports.

BBC collected prime contract and subcontract data from the Construction Contracts Information System (CCIS) that the Construction Division maintains. BBC collected the following information about each relevant construction prime contract from CCIS:

- Contract number;
- Description of work;
- Award date:
- Award amount;
- Amendment or change order amounts (when applicable);
- Location of work (i.e., WSDOT region);
- Whether the contract included USDOT funding; and
- Prime contractor name and identification number.

BBC also collected the following information about associated subcontracts:

- Associated prime contract number;
- Subcontract amount:
- Subcontract amendment or change order amounts (if applicable);
- Description of work; and
- Subcontractor name and identification number.

After collecting the necessary data about transportation-related construction prime contracts and subcontracts, the study team created electronic prime contract and subcontract data tables for use in the utilization and other analyses.

Engineering contracts. The study team also collected data on transportation-related engineering prime contracts — and associated subcontracts — that WSDOT awarded during the study period. BBC collected necessary prime contract and subcontract data from the electronic data that CSO maintains. BBC collected information about both standard engineering contracts and about task order-type contracts.² BBC collected the following information about each relevant engineering prime contract from CSO:

- Contract number;
- Description of work;
- Award date;
- Award amount:
- Amendment or change order amounts (when applicable);

² BBC treated each task order as a stand alone contract element.

- Whether the contract involved USDOT funding; and
- Prime consultant name and identification number.

BBC also collected the following information about associated subcontracts:

- Associated prime contract number;
- Subcontract amount:
- Subcontract amendment or change order amounts (if applicable);
- Description of work; and
- Subconsultant name and identification number.

After collecting the necessary data about transportation-related engineering prime contracts and subcontracts, the study team created electronic prime contract and subcontract data tables for use in the utilization and other analyses.

Local Programs contracts. Under the FHWA Federal-Aid Stewardship Agreement with WSDOT, H&LP serves as the steward of FHWA funding that goes to local agencies throughout the state. Cities, counties, and other local agencies award transportation contracts and WSDOT reimburses those contracting dollars using USDOT funds. Because WSDOT uses USDOT funds for Local Programs contracts, USDOT requires subrecipient local agencies to comply with WSDOT's implementation of the Federal DBE Program.

Data collection. H&LP maintains a comprehensive list of Local Programs contracts that WSDOT awarded during the study period. BBC worked with H&LP staff to conduct an e-mail survey with each local agency that awarded Local Programs contracts during the study period. BBC developed a letter of introduction and a data request form for each construction and engineering contract that local agencies awarded through Local Programs during the study period. H&LP staff then e-mailed each local agency the letter and a data request form for each Local Programs contract that the agency let during the study period.

The data request form included identifying information about each contract — contract number, contract title, award date, and award amount. Local agency representatives were asked to confirm that the agency in fact awarded the contract, and if so, the award amount or actual payment amounts to all prime contractors and subcontractors involved in the relevant project phases. The form also asked staff to provide contact information for all prime contractors and subcontractors involved with the project. They were then asked to e-mail the data request forms back to H&LP.

Response rate. With follow-up e-mails and assistance from WSDOT, BBC received valid prime contract and subcontract data on 397 of the 576 Local Program contracts that local agencies awarded during the study period. The information that BBC received about Local Programs contracts represented approximately 67 percent of the total dollars that local agencies awarded through the program during the study period.

Public Transportation Division (PTD) contracts. WSDOT administers some Federal Transit Administration (FTA)-funded construction and engineering contracts through PTD. PTD awards FTA-funded grants to local agencies which use most of those dollars in areas that are unrelated to transportation contracting. However, local agencies use some of that grant money to fund transportation-related construction and engineering projects, such as installing bus shelters; building or redesigning transit stations; and developing regional transportation plans.

BBC worked with PTD to obtain data on the FTA-funded grants that it awarded to local agencies during the study period and to identify construction and engineering contracting opportunities. PTD then contacted each local agency directly to collect data on each construction and engineering prime contract and subcontract. BBC obtained the following information about each relevant prime contract:

- Contract number;
- Description of work;
- Award amount;
- Location of work; and
- Prime consultant name and identification number.

BBC also collected the following information about associated subcontracts:

- Associated prime contract number;
- Subcontract amount: and
- Subconsultant name and identification number.

After collecting the necessary data about relevant prime contracts and subcontracts, the study team created electronic prime contract and subcontract data tables for use in the utilization and other analyses.

B. Collection of Vendor Information

WSDOT and local agencies provided contact and other information on businesses that they utilized as prime contractors and subcontractors on transportation-related construction and engineering contracts during the study period. Those data were included in the electronic data that WSDOT divisions and local agencies provided.

The study team also used information from OMWBE's Directory of Certified Firms to identify utilized businesses that were certified as DBEs, MBEs, or WBEs. The Directory of Certified Firms includes data on the race/ethnicity and gender of the owners of certified businesses. The study team calculated the certified DBE utilization data that are reported throughout this report using data from the Directory of Certified Firms as of January 30, 2012.

WSDOT and local agencies provided the following information about each utilized business:

- Firm name:
- Addresses and phone numbers; and
- DBE/MBE/WBE certification status.

BBC obtained additional information about utilized firms from business lists that the study team purchased from Dun & Bradstreet (D&B) and from telephone interviews that the study team conducted with prime contractors and subcontractors. BBC obtained the following additional information about utilized firms:

- Primary line of work;
- Firm size;
- Establishment year; and
- Additional contact information.

BBC relied on several sources of information to determine whether firms were owned by minorities or women and whether MBE/WBEs were DBE-certified, including:

- Telephone interviews with firm owners and managers;
- Information from the Directory of Certified Firms;
- WSDOT vendor data;
- WSDOT staff review; and
- Information from D&B and other sources.

For the purposes of the study, BBC relied on definitions that the Federal DBE Program uses to specify minority groups that are presumed to be disadvantaged:

- African American;
- Asian-Pacific American;
- Subcontinent Asian American;
- Hispanic American; and
- Native American.

C. Collection of WSDOT Bid and Proposal Data

BBC conducted a case study analysis of bids and proposals for a sample of transportation-related construction and engineering contracts that WSDOT awarded during the study period. WSDOT provided bid, proposal, and other related information to the BBC study team. For details about the case study analysis, see Chapter 8.

Construction contracts. WSDOT maintains electronic bid tabulations for the construction contracts that it awards. BBC examined bid information for a stratified random sample of 87 construction contracts that WSDOT awarded in FFYs 2009 through 2011.

Engineering contracts. The study team examined proposal information for a stratified random sample of 40 WSDOT engineering contracts for FFYs 2009 through 2011. WSDOT was unable to provide complete proposal evaluation information for 19 of those contracts, because they were sole-sourced. WSDOT was able to provide complete proposal evaluation information for the remaining 21 contracts.

D. WSDOT Review

WSDOT reviewed BBC's utilization data during several stages of the study process. The BBC study team met with WSDOT staff to review the data collection process, information that the study team gathered, and summary results. WSDOT staff also reviewed contract and vendor information. BBC incorporated WSDOT feedback in the final contract and vendor data that the study team used in the disparity study.

APPENDIX D. General Approach to Availability Analysis

The study team used a custom census approach to analyze the availability of minority- and women-owned business enterprises (MBE/WBEs) for transportation-related construction and engineering prime contracts and subcontracts that the Washington State Department of Transportation (WSDOT) and local agencies awarded between October 1, 2008 and September 30, 2011. Appendix D expands on the results and discussion presented in Chapter 5 by describing the study team's:

- A. General approach to collecting availability information;
- B. Development of the business establishments list;
- C. Development of the interview instrument;
- D. Execution of interviews; and
- E. Additional considerations related to measuring availability.

A. General Approach to Collecting Availability Information

BBC contracted with Customer Research International (CRI) to conduct telephone interviews with thousands of business establishments in Washington. Business establishments that CRI interviewed were businesses with locations in Washington that the study team identified as doing work in fields closely related to the types of transportation-related construction and engineering contracts that WSDOT awarded during the study period. The study team began the interview process by determining relevant subindustries for each relevant WSDOT contract element and identifying 8-digit Dun & Bradstreet (D&B) work specialization codes that best corresponded to those subindustries.¹ The study team then collected information about Washington business establishments that D&B listed as having their primary lines of business within those work specializations. Rather than drawing a sample of business listings from D&B, the study team attempted to contact every business establishment listed under relevant work specialization codes.²

The study team attempted to contact 14,528 business establishments in the local marketplace. That total included 12,474 construction establishments and 2,054 engineering establishments. The study team was able to successfully contact 4,784 of those establishments — about 45 percent of the establishments with valid phone listings. Of business establishments that the study team successfully contacted, 3,335 establishments completed availability interviews.

¹ 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 the federal government has prepared.

² Because D&B organizes its database by "business establishment" and not by "business" or "firm," BBC purchased business listings in that fashion. Therefore, in many cases, the study team purchased information about multiple Washington locations of a single business and called all of those locations. BBC's method for consolidating information for different establishments that were related to the same business is described later in Appendix D.

B. Development of the Business Establishments List

The study team did not expect every business establishment that it contacted to be potentially available for WSDOT work. The study team's goal was to develop — with a high degree of precision — unbiased estimates of the availability of MBE/WBEs for the types of transportation-related construction and engineering contracts that WSDOT awarded during the study period. In fact, for some subindustries, BBC anticipated that few businesses would be available to perform that type of work for WSDOT.

Similarly, BBC did not design the research effort so that the study team would contact every Washington business possibly performing construction or engineering work. To do so would have required including subindustries that are only marginally related (or unrelated) to the types of transportation-related construction and engineering contracts that WSDOT awarded during the study period. In addition, some business establishments working in relevant subindustries may have been missing from corresponding D&B listings.

BBC determined the types of work involved in WSDOT contract elements by reviewing prime contract and subcontract dollars that went to different types of businesses during the study period. Figure D-1 lists the 8-digit work specialization codes within construction and engineering that the study team determined were most related to the contract dollars that WSDOT awarded during the study period. BBC included those work specializations as part of the availability, utilization, and disparity analyses. The study team grouped those specializations into distinct subindustries, which are presented as headings in Figure D-1.

C. Development of the Interview Instrument

BBC drafted an availability interview instrument to collect business information from construction and engineering business establishments.³ WSDOT staff reviewed the interview instrument before the study team used it in the field. The interview instrument that the study team used with construction establishments is presented at the end of Appendix D. The study team modified the construction interview instrument slightly for use with engineering establishments in order to reflect terms more commonly used in the engineering industry (e.g., the study team substituted the words "prime contractor" and "subcontractor" with "prime consultant" and "subconsultant" when interviewing engineering establishments). In addition, the engineering interview instrument did not include questions related to prequalification, because WSDOT does not require engineering businesses to become prequalified.⁴

Interview structure. The availability interview included 15 sections, and CRI attempted to cover all sections with each business establishment that they successfully contacted and that was willing to complete an interview. Interviewers did not know the race/ethnicity or gender of business owners when calling business establishments.

³ BBC HAS used similar interview instruments as part of availability analyses for other state departments of transportation.

⁴ BBC also developed a fax and e-mail version of the interview instrument for business establishments that reported a preference to complete the interview in those formats.

Figure D-1. Construction and engineering work specializations and subindustries included in the availability, utilization, and disparity analyses

Industry code	Industry description	Industry code	Industry description
Construction			
Excavation, grading, drainage, drilling, and demolition		Water, sewer, and utility lines	
1611-0203	Grading	1623-0000	Water, sewer, and utility lines
1629-0400	Land preparation construction	1623-0203	Telephone and communication line construction
1629-9902	Earthmoving contractor	1623-0300	Water and sewer line construction
1794-0000	Excavation work	1623-0303	Water main construction
1794-9901	Excavation and grading, building construction	1623-9904	Pipeline construction, nsk
1795-0000	Wrecking and demolition work	1623-9906	Underground utilities contractor
1795-9901	Concrete breaking for streets and highways	1731-0302	Fiber optic cable installation
1795-9902	Demolition, buildings and other structures		
1799-0901	Boring for building construction	Electrical work, lighting, and signals	
1799-9906	Core drilling and cutting	1731-0000	Electrical work
		1731-0100	Electric power systems contractors
Construction sand	d and gravel	1731-0103	Standby or emergency power specialization
1442-0000	Construction sand and gravel	1731-0200	Electronic controls installation
1442-0201	Gravel mining	1731-9903	General electric contractor
5211-0506	Sand and gravel	1731-9904	Lighting contractor
Painting, striping,	Painting, striping, and marking		on equipment rental
1721-0200	Commercial painting	3531-9908	Road construction and maintenance machinery
1721-0300	Industrial painting	7353-0000	Heavy construction equipment rental
1721-0303	Pavement marking contractor	7389-9909	Crane and aerial lift service
Structural steel erection		Landscaping and erosion control	
1791-0000	Structural steel erection	0781-0200	Landscape services
1791-9905	Iron work, structural	0782-9903	Landscape contractors

Figure D-1.
Construction and engineering work specializations and subindustries included in the availability, utilization, and disparity analyses (continued)

Construction (continued)					
Highway, street, a	and tunnel construction	Asphalt and conc	Asphalt and concrete supply		
1611-0000	Highway and street construction	2951-0000	Asphalt paving mixtures and blocks		
1611-0200	Surfacing and paving	2951-0200	Paving mixtures		
1611-0202	Concrete construction; roads, highways, sidewalks, etc.	2951-0201	Asphalt and asphaltic paving mixtures		
1611-0204	Highway and street paving contractor	2951-0203	Concrete, asphaltic		
1611-0205	Resurfacing contractor	3272-0000	Concrete products, nec		
1611-0207	Gravel or dirt road construction	3273-0000	Ready-mixed concrete		
1611-9901	General contractor, highway and street construction	3531-0401	Asphalt plant, including gravel-mix type		
1611-9902	Highway and street maintenance	5032-0100	Paving materials		
1622-0000	Bridge, tunnel, and elevated highway construction	5211-0502	Cement		
1622-9901	Bridge construction				
1622-9902	Highway construction, elevated	Fencing, guardrails, barriers, and signs			
1622-9903	Tunnel construction	1611-0100	Highway signs and guardrails		
1622-9904	Viaduct construction	1611-0101	Guardrail construction, highways		
1629-9904	Pile driving contractor	1611-0102	Highway and street sign installation		
1741-0100	Foundation and retaining wall construction	1799-9912	Fence construction		
1741-0102	Retaining wall construction	7359-9912	Work zone traffic equipment (flags, cones, barrels, etc.)		
1771-0000	Concrete work				
1771-0102	Grouting work	Trucking and hauling			
1771-0103	Gunite contractor	4212-0000	Local trucking, without storage		
1771-0201	Curb construction	4212-9905	Dump truck haulage		
1771-0202	Sidewalk contractor	4212-9908	Heavy machinery transport, local		
1771-0300	Driveway, parking lot, and blacktop contractors	4212-9912	Steel hauling, local		
1771-0301	Blacktop (asphalt) work	4213-9905	Heavy machinery transport		
1771-0303	Parking lot construction				
1771-9901	Concrete pumping	Traffic control and flagging services			
1771-9902	Concrete repair	7389-9921	Flagging services (traffic control)		
1771-9904	Foundation and footing contractor				
1791-9902	Concrete reinforcement, placing of				

Figure D-1.
Construction and engineering work specializations and subindustries included in the availability, utilization, and disparity analyses (continued)

Construction (con	itinued)		
Other construction services		Other construction supplies	
1731-0201	Computerized control installation	3312-0405	Structural shapes and pilings, steel
1731-0300	Communications specialization	3441-0201	Bridge sections, prefabricated, highway
1791-9907	Precast concrete structural framing or panels, placing of	3449-0000	Miscellaneous metalwork
1799-0500	Exterior cleaning, including sandblasting	3449-0101	Bars, concrete reinforcing: fabricated steel
3731-0000	Shipbuilding and repairing	5039-9912	Soil erosion control fabrics
4959-0100	Road, airport, and parking lot maintenance service	5051-0209	Forms, concrete construction (steel)
4959-0102	Sweeping service: road, airport, parking lot, etc.	5063-0202	Cable conduit
		5063-0504	Signaling equipment, electrical
Marine work and dredging		5088-0101	Boats, non-recreational
1629-0110	Marine construction		
Engineering			
Engineering		Construction management	
8711-0000	Engineering services	8741-9902	Construction management
8711-0400	Construction and civil engineering		
8711-0402	Civil engineering	Environmental research, consulting and testing	
8742-0410	Transportation consultant	7389-0200	Inspection and testing services
8748-0204	Traffic consultant	8734-0300	Pollution testing
		8734-0301	Hazardous waste testing
Surveying		8734-9909	Soil analysis
7389-0800	Mapmaking services	8748-9905	Environmental consultant
7389-0801	Mapmaking or drafting, including aerial		
7389-0802	Photogrammetric mapping	Other professional services	
8713-0000	Surveying services	8733-0201	Archeological expeditions

Source: BBC Research & Consulting.

- **1. Identification of purpose.** The interviews began by identifying WSDOT as the interview sponsor and describing the purpose of the study (i.e., "developing a list of companies involved in construction, maintenance, or design work on a wide range of highway and other state or local government transportation-related projects").
- **2. Verification of correct business name.** The interviewer verified that he or she had reached the correct business, and if not, inquired about the correct contact information for the correct business. When the business name was not correct, interviewers asked if the respondent knew how to contact the business. CRI followed up with the desired company based on the new contact information (see areas "X" and "Y" of the Availability Interview Instrument at the end of Appendix D).
- **3. Verification of work related to transportation-related projects.** The interviewer asked whether the organization does work or provides materials related to construction, maintenance, or design on transportation-related projects (Question A1). Interviewers continued the interview with businesses that responded "yes" to that question.
- **4. Verification of for-profit business status.** The interviewer asked whether the organization was a for-profit business as opposed to a government or not-for-profit entity (Question A2). Interviewers continued the interview with businesses that responded "yes" to that question.
- **5. Confirmation of main lines of business.** Construction businesses confirmed their main lines of business according to prequalification categories that WSDOT uses (Question A3). All businesses also confirmed their main lines of business according to D&B (Question A4a). If D&B's work specialization codes were incorrect, businesses then described their main lines of business (Question A4b). After the interview was complete, BBC coded new information on main lines of business into appropriate 8-digit D&B work specialization codes.
- **6. Sole location or multiple locations.** Because the study team interviewed business establishments and not businesses or firms, the interviewer asked business owners or managers if their businesses had other locations (Question A5), and whether their establishments were affiliates or subsidiaries of other firms (Questions A8 and A9).
- **7.** Past bids or work with government agencies and private sector organizations. The interviewer asked about bids and work on past government and private sector contracts. CRI asked those questions in connection with both prime contracts and subcontracts (Questions B1 through B8).
- **8.** Qualifications and interest in future transportation work. The interviewer asked about businesses' qualifications and interest in future work with WSDOT and other government agencies. CRI asked those questions in connection with both prime contracts and subcontracts (Questions B9 through B12).
- **9. Geographic areas.** The interviewer asked a series of questions about the geographic regions in Washington in which businesses serve customers (Questions C1a through C1f).
- **10. Year established.** The interviewer asked businesses to identify the approximate year in which they were established (Question D1).

- **11. Largest contracts.** The study team asked businesses to identify the value of the largest contract on which they had bid on or had been awarded in Washington during the past five years. CRI asked those questions for both prime contracts and subcontracts (Questions D2 through D4).
- **12. Ownership.** The interviewer asked whether businesses were at least 51 percent owned and controlled by women and/or minorities. If businesses indicated that they were minority-owned, they were also asked about the race/ethnicity of ownership (Questions E1 through E3). The study team confirmed that information through several other data sources, including:
- Information from the Washington State Office of Minority and Women's Business Enterprises (OMWBE) Directory of Certified Firms;
- WSDOT vendor data:
- WSDOT staff review: and
- Information from D&B and other sources.

When information about race/ethnicity or gender of ownership conflicted between sources, the study team reconciled that information through follow-up telephone calls with the businesses.

- **13. Business size.** The interviewer asked several questions about the size of businesses in terms of their revenues and number of employees. For businesses with multiple locations, this section also asked about their revenues and number of employees across all locations (Questions F1 through F6).
- **14. Potential barriers in the marketplace.** The interviewer asked a series of questions concerning general insights about the marketplace and WSDOT contracting practices (Questions G1a through G1j). The interview also included an open-ended question about the local marketplace (Question G2). In addition, the interview included a question asking whether interviewees would be willing to participate in a follow-up interview about marketplace conditions (Question G3).
- **15. Contact information.** The interview concluded by collecting complete contact information for the establishment and the individual who completed the interview (Questions H1 through H6).

D. Execution of Interviews

BBC held planning and training sessions both in person and via telephone with CRI executives and interviewers prior to conducting the availability interviews. CRI conducted the interviews in early and mid-2012. CRI programmed the interviews and conducted them via telephone. CRI provided BBC with weekly data reports.

To minimize non-response, CRI made at least five attempts on different times of day and on different days of the week to successfully reach each business establishment. CRI identified and attempted to interview an available company representative such as the owner, manager, chief financial officer, or other key official who could provide accurate and detailed responses to the questions included in the interview.

Establishments that the study team successfully contacted. Figure D-2 presents the disposition of the 14,528 business establishments that the study team attempted to contact for availability interviews and how that number resulted in the 4,784 establishments that the study team was able to successfully contact.

Figure D-2.
Disposition of attempts to interview business establishments

Note: CRI made up to five attempts to complete an interview with each establishment.

Source: BBC Research & Consulting from 2012 availability Interviews.

	Number of firms	Percent of business listings
Beginning list	14,528	
Less duplicate numbers	306	
Less non-working phone numbers	3,003	
Less wrong number/business	659	
Unique business listings with working phone numbers	10,560	100.0 %
Less no answer	1,295	12.3
Less could not reach responsible staff member	4,049	38.3
Less language barrier	90	0.9
Less unreturned fax/email	342	3.2
Establishments successfully contacted	4,784	45.3 %

Non-working or wrong phone numbers. Some of the business listings that the study team purchased from D&B and that CRI attempted to contact were:

- Duplicate phone numbers (306 listings);
- Non-working phone numbers (3,003 listings); or
- Wrong numbers for the desired businesses (659 listings).

Some non-working phone numbers and wrong numbers reflected businesses going out of business or changing their names and phone numbers between the time that D&B listed them and the time that the study team attempted to contact them.

Working phone numbers. As shown in Figure D-2, there were 10,560 business establishments with working phone numbers that CRI attempted to contact. CRI was unsuccessful in contacting many of those businesses for various reasons:

- CRI could not reach anyone after five attempts at different times of the day and on different days of the week for 1,295 establishments.
- CRI could not reach a responsible staff member after five attempts at different times of the day on different days of the week for 4,049 establishments.
- CRI could not conduct availability interviews due to language barriers for 90 establishments.
- CRI sent hardcopy fax or e-mail availability interviews upon request but did not ultimately receive completed interviews for 342 establishments.

After taking those unsuccessful attempts into account, CRI was able to successfully contact 4,784 business establishments, or 45 percent of business establishments with valid phone listings.

Establishments included in the availability database. Figure D-3 presents the disposition of the 4,784 business establishments that CRI successfully contacted and how that number resulted in the 988 businesses that the study team included in the availability database.

Figure D-3.
Disposition of successfully contacted business establishments

Note:

Two hundred and thirty-eight of these firms were not included in the availability marketplace analysis (Appendix H), because they did not respond to question D2 or D4 on the availability survey.

Source:

BBC Research & Consulting from 2012 availability Interviews.

	Number of firms
Establishments successfully contacted	4,784
Less establishments not interested in discussing availability for WSDOT work	1,449
Establishments that completed interviews about firm characteristics	3,335
Less no road and highway related work	2,168
Less not a for-profit business	33
Less line of work outside scope	17
Less no past bid/award	64
Less no interest in future work	17
Less established after the study period (2011)	1
Less not available to work in geographic area	1
Less multiple establishments	46
Firms available for WSDOT work	988

Establishments not interested in discussing availability for WSDOT work. Of the 4,784 business establishments that the study team successfully contacted, 1,449 establishments were not interested in discussing their availability for WSDOT work. Thus, 3,335 of successfully-contacted business establishments (70%) completed availability interviews.

Establishments available for WSDOT work. The study team only deemed a portion of the business establishments that completed availability interviews as potentially available for the transportation-related construction or engineering prime contracts and subcontracts that WSDOT awarded during the study period. The study team excluded many of the businesses that completed interviews from the availability database for various reasons:

- BBC excluded 2,168 establishments that indicated that their businesses were not involved in transportation contracting work.
- Of the establishments that completed availability interviews, 33 indicated that they were not a for-profit business. The interview ended when respondents reported that their establishments were not for-profit businesses.
- BBC excluded 17 establishments that indicated that their businesses were involved in construction or engineering work but reported that their main lines of business were outside of the study scope.
- BBC excluded 64 firms that reported not having bid on or been awarded contracts in Washington within the past five years.
- BBC excluded 17 firms that reported not being qualified or interested in either prime contracting or subcontracting opportunities with WSDOT.
- BBC excluded one business establishment that reported being established in October 2011 or later. That business establishment would not have been available for contract and subcontract pieces that WSDOT and local agencies awarded during the study period.

- BBC excluded one business establishment that did not report doing work in the geographic study area.
- Forty-six establishments represented different locations of the same businesses. Prior to analyzing results, BBC combined responses from multiple locations of the same business into a single data record.

After those exclusions, the interview effort produced a database of 988 businesses that are potentially available for WSDOT work.

Coding responses from multi-location businesses. Responses from different locations of the same business were combined into a single, summary data record according to several rules:

- If any of the establishments reported bidding or working on a contract within a particular subindustry, the study team considered the business to have bid or worked on a contract in that subindustry.
- The study team combined the roles of work that establishments reported (i.e., prime contractor or subcontractor) into a single response, again corresponding to the appropriate subindustry. For example, if one establishment reported that it works as a prime contractor and another establishment reported that it works as a subcontractor, then the study team considered the business as available for both prime contracts and subcontracts within the relevant subindustry.
- If any establishment reported serving customers within any region of Washington (see Questions C1a-C1f of the availability interview instrument), then the study team considered the business to be available for work in the specified regions.
- Except when there were large discrepancies among individual responses regarding establishment dates, BBC used the median founding date that the establishments provided.
 In cases of large discrepancies, BBC followed up with the business establishments to obtain accurate establishment date information.
- BBC considered the largest contract that any establishment reported having bid or worked on as the largest contract for which the business could be considered available.
- BBC considered the largest revenue total that any establishment reported as the revenue cap for the business (for purposes of determining status as potential Disadvantaged Business Enterprises (DBEs)).
- BBC determined the number of employees for businesses by calculating the mode or the mean of responses from its establishments.
- BBC coded businesses as minority- or women-owned if most of its establishments indicated such status.

E. Additional Considerations Related to Measuring Availability

The study team made several additional considerations related to its approach to measuring availability, particularly as they related to WSDOT'S implementation of the Federal DBE program.

Not providing a count of all businesses available for WSDOT work. The purpose of the availability interviews was to provide precise and representative estimates of the percentage of MBE/WBEs potentially available for WSDOT work. The availability analysis did not provide a comprehensive listing of every business that could be available for WSDOT work and should not be used in that way. Federal courts have approved the custom census approach to measuring availability that BBC used in this study. The United States Department of Transportation's (USDOT's) "Tips for Goals Setting in the Disadvantaged Business Enterprise (DBE) Program" also recommends a similar approach to measuring availability for agencies implementing the Federal DBE Program.⁵

Not using MBE/WBE or DBE directories, prequalification lists, or bidders lists.

USDOT guidance for determining MBE/WBE availability recommends dividing the number of businesses in an agency's DBE directory by the total number of businesses in the marketplace, as reported in U.S. Census data. As another option, USDOT suggests using a list of prequalified businesses or a bidders list to estimate the availability of MBE/WBEs for an agency's prime contracts and subcontracts.

The primary reason why the study team rejected such approaches when measuring MBE/WBE availability for WSDOT work is that dividing a simple count of certified DBEs by the total number of businesses does not provide the data on business characteristics that the study team desired for the disparity study. The methodology applied in this study takes a custom census approach to measuring availability and adds several layers of refinement to a simple head count approach. For example, the interviews provide data on businesses' qualifications, relative capacities, and interest in WSDOT work, which allowed the study team to take a more refined approach to measuring availability. Court cases involving state implementation of the Federal DBE Program have approved the use of a custom census approach to measuring availability.

Note that BBC used MBE/WBE and DBE directories and other sources of information to confirm information about the race/ethnicity and gender of business ownership that it obtained from availability interviews.

Using D&B lists as the sample frame. BBC began its custom census approach to measuring availability with D&B business lists. D&B does not require firms to pay a fee to be included in its listings — it is completely free to listed firms. D&B provides the most comprehensive private database of business listings in the United States. Even so, the database does not include all establishments operating in Washington:

There can be a lag between formation of a new business and inclusion in D&B, meaning that the newest businesses may be underrepresented in the sample frame. Based on information from BBC's interview effort, newly formed businesses are more likely to be minority- or women-owned, suggesting that MBE/WBEs might be underrepresented in the final availability database.

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⁵ Tips for Goals Setting in the Disadvantaged Business Enterprise (DBE) Program, http://www.osdbu.dot.gov/dbeprogram/tips.cfm

Although D&B includes home-based businesses, those businesses are more difficult to identify and are thus somewhat less likely than other businesses to be included in D&B listings. Small, home-based businesses are more likely than large businesses to be minority- or women-owned, which again suggests that MBE/WBEs might be underrepresented in the final availability database.

BBC is not able to quantify how much, if any, underrepresentation of MBE/WBEs exists in the final availability database. However, BBC concludes that any such underrepresentation would be minor and would not have a meaningful effect on the availability and disparity analyses presented in this report. In addition, there are no alternative business listings that would better address such issues.

Selection of specific subindustries. Defining subindustries based on specific work specialization codes (e.g., NAICS, SIC, or D&B codes) is a standard step in analyzing an economic sector. Government and private sector economic data are typically organized according to such codes. As with any such research, there are limitations when choosing specific D&B work specialization codes to define sets of establishments to be interviewed. For example, it was not possible for BBC to include all businesses possibly doing work in the transportation contracting industry without conducting interviews with nearly every business in Washington.

In addition, some D&B codes are imprecise and overlap with other business specialties, and D&B does not maintain an 8-digit level of detail for each firm in its database. Some businesses span several types of work, even at the 4-digit level of specificity. That overlap can make classifying firms into single main lines of business difficult and imprecise. When the study team asked business owners and managers to identify main lines of business, they often gave broad answers. For those and other reasons, BBC collapsed many of the work specialization codes into broader subindustries to more accurately classify firms in the availability database.

Non-response bias. An analysis of non-response bias considers whether businesses that were not successfully interviewed are systematically different from those that were successfully interviewed and included in the final data set. There are opportunities for non-response bias in any survey effort. The study team considered the potential for non-response bias due to:

- Research sponsorship;
- Work specializations; and
- Language barriers.

Research sponsorship. Interviewers introduced themselves by identifying WSDOT as the interview sponsor because businesses may be less likely to answer somewhat sensitive business questions if the interviewer was unable to identify the sponsor. In past interview efforts — particularly those related to availability studies — BBC has found that identifying the sponsor substantially increases businesses' willingness to participate in interviews.

Work specializations. Businesses in highly mobile fields, such as trucking, may be more difficult to reach for availability interviews than businesses more likely to work out of fixed offices (e.g., engineering firms). That assertion suggests that response rates may differ by work specialization. Simply counting all interviewed businesses across work specializations to

determine overall MBE/WBE availability would lead to estimates that were biased in favor of businesses that could be easily contacted by telephone.

However, work specialization as a potential source of non-response bias in the BBC availability analysis is minimized, because the availability analysis examines businesses 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 percentage of MBE/WBE availability is calculated within trucking before being combined with information from other work fields in a dollar-weighted fashion. In this example, work specialization would be a greater source of non-response bias if particular subsets of trucking firms were less likely than other subsets to be easily contacted by telephone.

Language barriers. WSDOT contracting documents are in English and are not in other languages. For that reason, the study team made the decision to only include businesses able to complete the interview in English in the availability analysis. Businesses unable to complete the interviews due to language barriers represented less than one percent of the business list.

Response reliability. Business owners and managers were asked questions that may be difficult to answer, including questions about revenues and employment. For that reason, the study team collected corresponding D&B information for their establishments and asked respondents to confirm that information or provide more accurate estimates. Further, respondents were typically not asked to give absolute figures for difficult questions such as revenue and number of employees. Rather, they were given ranges of dollar figures and employment levels.

BBC explored the reliability of interview responses in a number of ways. For example:

- BBC reviewed data from the availability interviews in light of information from other sources such as the OMWBE Directory of Certified Firms and vendor information that the study team collected from WSDOT. For example, the OMWBE Directory of Certified Firms includes data on the race/ethnicity and gender of the owners of DBE-certified businesses. The study team compared interview responses concerning business ownership with OMWBE data.
- BBC examined WSDOT and local agency contract data to further explore the largest contracts and subcontracts awarded to businesses that participated in the availability interviews. BBC compared interview responses about the largest contracts that businesses won during the past five years with actual WSDOT and local agency contract data.
- WSDOT reviewed vendor data that the study team collected and compiled as part of the availability analysis.

WSDOT Disparity Study — Availability Survey Instrument [Construction]

Hello. My name is [interviewer name] from Customer Research International. We are calling on behalf of the Washington State Department of Transportation (WSDOT), including the Construction Division, Consultant Services Offices, Public Transportation Division, Washington State Ferries Division, and the Aviation Division.

This is not a sales call. WSDOT is developing a list of companies involved in construction, maintenance, or design on a wide range of highway and other state or local government transportation-related projects. Who can I speak with to get the information we need from your firm?

[AFTER REACHING 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 WSDOT'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
99=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

3=Company bought/sold/changed ownership - SKIP TO Y4

98=No, does not have information - TERMINATE

99=Refused to give information – TERMINATE

Y3. Can you give me the complete address or city for [firm name]? - SKIP TO Y5

(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 him/her?

(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

2=NO - TERMINATE

A1. First, I want to confirm that your firm does work or provides materials related to construction, maintenance, or design on transportation-related projects. Is this correct?

(NOTE TO INTERVIEWER – INCLUDES ANY WORK RELATED TO CONSTRUCTION, MAINTENENCE OR DESIGN SUCH AS BUILDING AND PARKING FACILITIES, PAVING AND CONCRETE, TUNNELS, BRIDGES AND ROADS AND OTHER TRANSPORTATION-RELATED PROJECTS. IT ALSO INCLUDES TRUCKING AND HAULING AND ANY CONSTRUCTION OR ENGINEERING WORK FOR WSDOT'S PUBLIC TRANSPORTATION DIVISION, FERRIES DIVISION, AND AVIATION DIVISION.)

(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=No, other - TERMINATE

A3. Next, we're interested in the types of work that [firm name/new firm name] performs. Does your firm do work in the area of:

[READ, MULTIPUNCH]

1 = Highway, street, and tunnel construction?

[NOTE TO INTERVIEWER: IF ASKED, THIS WORK AREA INCLUDES CEMENT CONCRETE CURB AND GUTTER; ASPHALT CONCRETE CURB AND GUTTER; CEMENT CONCRETE PAVING; ASPHALT CONCRETE PAVING; CONCRETE RESTORATION; CONCRETE SAWING, CORING, AND GROOVING; CONCRETE SURFACE TREATMENT; PRODUCTION AND PLACING OF CRUSHED MATERIALS; BITUMINOUS SURFACE TREATMENT; AND DRILLED LARGE DIAMETER SLURRY SHAFTS]

2 = Bridge and elevated highway construction?

[NOTE TO INTERVIEWER: IF ASKED, THIS WORK AREA INCLUDES BRIDGES AND STRUCTURES; STEEL FABRICATION; BRIDGE DECK REPAIR; PILEDRIVING; AND DECK SEAL]

3 = Excavation, grading, drainage, drilling, and demolition?

[NOTE TO INTERVIEWER: IF ASKED, THIS WORK AREA INCLUDES CLEARING, GRUBBING, GRADING, AND DRAINING; DEMOLITION; TUNNELS AND SHAFT EXCAVATION; GROUND MODIFICATION; ASBESTOS ABATEMENTS; DRILLING AND BLASTING; AND WELL DRILLING]

4 = Water and sewer lines?

[NOTE TO INTERVIEWER: IF ASKED, THIS WORK AREA INCLUDES SEWER AND WATER MAINS; AND WATER DISTRIBUTION AND IRRIGATION]

5 = Painting, striping, and marking?

[NOTE TO INTERVIEWER: IF ASKED, THIS WORK AREA INCLUDES PAINTING; PAVEMENT MARKING (EXCLUDING PAINTING); SANDBLASTING AND STEAM CLEANING; PAINT STRIPING; AND STRUCTURAL TILE CLEANING]

6 = Fencing, guardrails, barriers, and signs?

[NOTE TO INTERVIEWER: IF ASKED, THIS WORK AREA INCLUDES CONCRETE STRUCTURES EXCEPT BRIDGES; RIPRAP AND ROCK WALLS; SIGNING; FENCING; PRECAST MEDIAN BARRIERS; WIRE MESH SLOPE PROTECTION; PERMENANT TIE-BACK ANCHOR; GUARDRAIL; GABION AND GABION CONSTRUCTION; IMPACT ATTENUATORS; AND SLURRY DIAPHRAGM AND CUT-OFF WALLS]

7 = Electrical work, lighting, and signal systems?

[NOTE TO INTERVIEWER: IF ASKED, THIS WORK AREA INCLUDES ILLUMINATION AND GENERAL ELECTRIC; TRAFFIC SIGNALS; ELECTRONICS-FIBER OPTIC BASED COMMUNICATIONS SYSTEMS; AND INTELLIGENT TRANSPORTATION SYSTEMS (ITS)]

8 = Traffic control and flagging services?

9 = Trucking and hauling?

[NOTE TO INTERVIEWER: IF ASKED, THIS WORK AREA INCLUDES MATERIALS TRANSPORTING; HAZARDOUS WASTE REMOVAL; AND SEWAGE DISPOSAL]

10 = Plumbing and HVAC?

[NOTE TO INTERVIEWER: IF ASKED, THIS WORK AREA INCLUDES PLUMBING, HVAC, AND OTHER MECHANICAL WORK]

11 = Landscaping and erosion control?

[NOTE TO INTERVIEWER: IF ASKED, THIS WORK AREA INCLUDES EROSION CONTROL; LANDSCAPING; AND STREET CLEANING]

12 = Commercial and industrial building construction?

[NOTE TO INTERVIEWER: IF ASKED, THIS WORK AREA INCLUDES BUILDING CONSTRUCTION AND REMODELING]

13 = Railroad construction?

[NOTE TO INTERVIEWER: IF ASKED, THIS WORK AREA INCLUDES RAILROAD SUBGRADE CONSTRUCTION; PLACING OF BALLAST, TIES, AND TRACK; AND OTHER RAILROAD-RELATED WORK]

```
14 = Marine work and dredging?15 = Engineering?16 = Surveying?
```

A4a. Let me also confirm what kind of business this 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]?

(NOTE TO INTERVIEWER: IF RESPONDENT INDICATES THAT FIRM'S MAIN LINE OF BUSINESS IS "GENERAL CONSTRUCTION" OR GENERAL CONTRACTOR," PROBE TO FIND OUT IF MAIN LINE OF BUSINESS IS CLOSER TO INDUSTRIAL BUILDING CONSTRUCTION OR HIGHWAY AND ROAD CONSTRUCTION.)

(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
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) – SKIP TO B1
99=(REFUSED) – SKIP TO B1
```

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 transportation-related construction, maintenance, or design. During the past five years, has your company submitted a bid or a price quote for any part of a contract for a state or local government agency in Washington?

```
1=Yes

2=No - SKIP TO B3

98=(DON'T KNOW) - SKIP TO B3

99=(REFUSED) - SKIP TO B3
```

B2. Were those bids or price quotes to work as a prime contractor, a subcontractor, a trucker/hauler, or as a supplier?

[MULTIPUNCH]

```
1=Prime contractor 4=Supplier (or manufacturer)
2=Subcontractor 98=(DON'T KNOW)
3=Trucker/hauler 99=(REFUSED)
```

B3. During the past five years, has your company worked on any part of a contract for a state or local government agency in Washington?

```
1=Yes

2=No - SKIP TO B5

98=(DON'T KNOW) - SKIP TO B5

99=(REFUSED) - SKIP TO B5
```

B4. Did your company work on those contracts as a prime contractor, a subcontractor, a trucker/hauler, or as a supplier?

[MULTIPUNCH]

```
1=Prime contractor 4=Supplier (or manufacturer)
```

2=Subcontractor 98=(DON'T KNOW)

3=Trucker/hauler 99=(REFUSED)

B5. During the past five years, has your company submitted a bid or a price quote for any part of a contract for a private sector organization in Washington?

```
1=Yes

2=No - SKIP TO B7

98=(DON'T KNOW) - SKIP TO B7

99=(REFUSED) - SKIP TO B7
```

B6. Were those bids or price quotes to work as a prime contractor, a subcontractor, a trucker/hauler, or as a supplier?

[MULTIPUNCH]

```
1=Prime contractor 4=Supplier (or manufacturer)
```

2=Subcontractor 98=(DON'T KNOW)

3=Trucker/hauler 99=(REFUSED)

B7. During the past five years, has your company worked on any part of a contract for a private sector organization in Washington?

```
1=Yes

2=No - SKIP TO B9

98=(DON'T KNOW) - SKIP TO B9

99=(REFUSED) - SKIP TO B9
```

B8. Did your company work on those contracts as a prime contractor, a subcontractor, a trucker/hauler, or as a supplier?

[MULTIPUNCH]

```
1=Prime contractor 4=Supplier (or manufacturer)
```

2=Subcontractor 98=(DON'T KNOW)

3=Trucker/hauler 99=(REFUSED)

B9. Please think about future transportation-related work as you answer the following few questions. Is your company qualified and interested in working with WSDOT as a prime contractor?

```
1=Yes
2=No
98=(DON'T KNOW)
99=(REFUSED)
```

B10. Is your company qualified and interested in working with cities, counties, or other local transportation agencies in Washington as a prime contractor?

```
1=Yes
2=No
98=(DON'T KNOW)
99=(REFUSED)
```

B11. Is your company qualified and interested in working with WSDOT as a subcontractor, trucker/hauler, or supplier?

```
1=Yes
2=No
98=(DON'T KNOW)
99=(REFUSED)
```

B12. Is your company qualified and interested in working with cities, counties, or other local transportation agencies in Washington as a subcontractor, trucker/hauler, or supplier?

```
1=Yes
2=No
98=(DON'T KNOW)
99=(REFUSED)
```

Now I want to ask you about the geographic areas your company serves within Washington. As you answer, think about whether your company could be involved in potential transportation-related projects in that region.

C1a. Could your company do work in the Olympic Region, extending northwest from Olympia through Clallam County and Forks?

[NOTE TO INTERVIEWER: IF ASKED, THE OLYMPIC REGION INCLUDES CLALLAM, GRAYS HARBOR, JEFFERSON, KITSAP, MASON, PIERCE, AND THURSTON COUNTIES.]

```
1=Yes
2=No
98=(DON'T KNOW)
99=(REFUSED)
```

C1b. Could your company do work in the Southwest Region, extending northwest from Klickitat County and the Oregon border to Long Beach?

[NOTE TO INTERVIEWER: IF ASKED, THE SOUTHWEST REGION INCLUDES CLARK, COWLITZ, KLICKITAT, LEWIS, PACIFIC, SKAMANIA, AND WAHKIAKUM COUNTIES.]

```
1=Yes
2=No
98=(DON'T KNOW)
99=(REFUSED)
```

C1c. Could your company do work in the Northwest Region, extending north from Federal Way through Seattle and up to the Canadian border?

[NOTE TO INTERVIEWER: IF ASKED, THE NORTHWEST REGION INCLUDES KING, SKAGIT, SNOHOMISH, AND WHATCOM COUNTIES.]

```
1=Yes
2=No
98=(DON'T KNOW)
99=(REFUSED)
```

C1d. Could your company do work in the North Central Region, extending north from Moses Lake and Wenatchee up to the Canadian border?

[NOTE TO INTERVIEWER: IF ASKED, THE NORTH CENTRAL REGION INCLUDES CHELAN, DOUGLAS, GRANT, AND OKANOGAN COUNTIES.]

```
1=Yes
2=No
98=(DON'T KNOW)
99=(REFUSED)
```

C1e. Could your company do work in the South Central Region, extending east from Yakima through Walla Walla to the southeast corner of the state?

[NOTE TO INTERVIEWER: IF ASKED, THE SOUTH CENTRAL REGION INCLUDES ASOTIN, BENTON, COLUMBIA, FRANKLIN, GARFIELD, KITTITAS, WALLA WALLA, AND YAKIMA COUNTIES.]

```
1=Yes
2=No
98=(DON'T KNOW)
99=(REFUSED)
```

C1f. Could your company do work in the Eastern Region, extending north from Pullman through Spokane to the Canadian border?

[NOTE TO INTERVIEWER: IF ASKED, THE EASTERN REGION INCLUDES ADAMS, FERRY, LINCOLN, PEND OREILLE, SPOKANE, STEVENS, AND WHITMAN COUNTIES.]

```
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 won in Washington during the past five years?

(NOTE TO INTERVIEWER – IF ASKED, INCLUDES EITHER PRIVATE SECTOR OR PUBLIC SECTOR)

(NOTE TO INTERVIEWER - INCLUDES CONTRACTS NOT YET COMPLETE)

(NOTE TO INTERVIEWER - READ CATEGORIES IF NECESSARY)

1=\$100,000 or less

8=More than \$20 million to \$50 million

2=More than \$100,000 to \$500,000

9=More than \$50 million to \$100 million

10= More than \$100 million to \$200 million

4=More than \$1 million to \$2 million

11=\$200 million or greater

5=More than \$2 million to \$5 million

97=(NONE)

6=More than \$5 million to \$10 million

98=(DON'T KNOW)

7=More than \$10 million to \$20 million

99=(REFUSED)

D3. Was that the largest transportation-related contract or subcontract that your company bid on or submitted quotes for in Washington 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 transportation-related contract or subcontract that your company bid on or submitted quotes for in Washington during the past five years?

(NOTE TO INTERVIEWER – IF ASKED, INCLUDES EITHER PRIVATE SECTOR OR PUBLIC SECTOR)

(NOTE TO INTERVIEWER – READ CATEGORIES IF NECESSARY)

1=\$100,000 or less	8=More than \$20 million to \$50 million
2=More than \$100,000 to \$500,000	9=More than \$50 million to \$100 million
3=More than \$500,000 to \$1 million	10= More than \$100 million to \$200 million
4=More than \$1 million to \$2 million	11=\$200 million or greater
5=More than \$2 million to \$5 million	97=(NONE)
6=More than \$5 million to \$10 million	98=(DON'T KNOW)
7=More than \$10 million to \$20 million	99=(REFUSED)

E1. My next questions are about the ownership of the business. A business is defined as woman-owned 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 F1

3=(OTHER GROUP - SPECIFY)

98=(DON'T KNOW) - SKIP TO F1

99=(REFUSED) - SKIP TO F1
```

E2. OTHER GROUP - SPECIFY

1=VERBATIM

E3. Would you say that the minority group ownership of your company 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 an accurate estimate of your company's average employees from 2009 through 2011?

(NOTE TO INTERVIEWER - INCLUDES EMPLOYEES WHO WORK AT THAT LOCATION AND THOSE WHO WORK FROM THAT LOCATION)

```
1=Yes - SKIP TO F3
2=No
98=(DON'T KNOW) - SKIP TO F3
99=(REFUSED) - SKIP TO F3
```

F2. About how many employees did you have working out of just your location, on average, from 2009 through 2011?

```
(RECORD NUMBER OF EMPLOYEES)

1=NUMERIC (1-999999999)
```

F3. Dun & Bradstreet lists the average annual gross revenue of your company, just considering your location, to be [dollar amount]. Is that an accurate estimate for your company's average annual gross revenue from 2009 through 2011?

```
1=Yes - SKIP TO F5

2=No

98=(DON'T KNOW) - SKIP TO F5

99=(REFUSED) - SKIP TO F5
```

F4. Roughly, what was the average annual gross revenue of your company, just considering your location, from 2009 through 2011? Would you say . . . (READ LIST)

```
1=Less than $1 Million 6=$14.1 Million - $18.5 Million
2=$1 Million - $4.5 Million 7=$18.6 Million - $22.4 Million
3=$4.6 Million - $7 Million 8=$22.5 Million or more
4=$7.1 Million - $12 Million 98= (DON'T KNOW)
5=$12.1 Million - $14.0 Million 99= (REFUSE
```

F5. About how many employees did you have, on average, for all of your locations from 2009 through 2011? — ONLY ASK IF A5 = 2

```
1=(ENTER RESPONSE)
98=(DON'T KNOW)
99=(REFUSED)
```

F5. RECORD NUMBER OF EMPLOYEES - ONLY ASK IF A5 = 2

```
1=VERBATIM
```

F6. Roughly, what was the average annual gross revenue of your company, for all of your locations from 2009 through 2011? Would you say . . . (READ LIST) – ONLY ASK IF A5 = 2

```
      1=Less than $1 Million
      6=$16.6 Million - $18.5 Million

      2=$1 Million - $4.5 Million
      7=$18.6 Million - $22.4 Million

      3=$4.6 Million - $7 Million
      8=$22.5 Million or more

      4=$7.1 Million - $12 Million
      98= (DON'T KNOW)

      5=$12.1 Million - $16.5 Million
      99= (REFUSED)
```

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 in Washington 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 experienced 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 WSDOT?

```
1=Yes
2=No
98=(Don't know)
99=(Does not apply)
```

G1g. Has your company experienced any difficulties learning about bid opportunities with other state or local government agencies in Washington?

```
1=Yes
2=No
98=(Don't know)
99=(Does not apply)
```

G1h. Has your company experienced any difficulties with learning about bid opportunities in
the private sector in Washington?

```
1=Yes
2=No
98=(Don't know)
99=(Does not apply)
```

G1i. Has your company experienced any difficulties learning about subcontracting opportunities in Washington?

```
1=Yes
2=No
98=(Don't know)
99=(Does not apply)
```

G1j. Has your company experienced any difficulties receiving payment in a timely manner?

```
1=Yes
2=No
98=(Don't know)
99=(Does not apply)
```

G2. Finally, we're asking for general insights on starting and expanding a business in your industry or winning work in Washington. 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?

(RECORD FULL NAME)

1=VERBATIM

H2. What is your position at [firm name/new firm name]?

1=Receptionist 7=Sales manager

2=0wner 8=0ffice manager

3=Manager 9=President

4=CFO 9=(OTHER - SPECIFY)

5=CEO 99=(REFUSED)

6=Assistant to Owner/CEO

H2. OTHER - SPECIFY

1=VERBATIM

H3. For purposes of receiving information from WSDOT, 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 WSDOT use to fax any materials to you?

1=NUMERIC (1000000000-999999999)

H6. What e-mail address could WSDOT 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 Jackie Bayne at WSDOT. Her phone number is (360) 705-7084. If you would like to contact her via email, her email address is baynej@dot.wa.gov.

APPENDIX E. Entry and Advancement in the Washington Construction and Engineering Industries

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-owned businesses. In the marketplace appendices (Appendix E through Appendix I), BBC examines whether some of the barriers to business formation that Congress found for minority- and women-owned businesses also appear to occur in the state of Washington.

One potential source of barriers to business formation is barriers associated with entry and advancement in the construction and engineering industries. Appendix E examines recent data on education, employment, and workplace advancement that may ultimately influence business formation in the Washington construction and engineering industries.^{2,3}

Introduction

BBC examined whether there were barriers to the formation of minority- and women-owned businesses in Washington. Business ownership often results from an individual entering an industry as an employee and then advancing within that industry. Within the entry and advancement process, there may be some barriers that limit opportunities for minorities and women. Figure E-1 presents a model of entry and advancement in the construction and engineering industries.

Appendix E uses 1980 and 2000 Census data and 2008-2010 American Community Survey (ACS) data to analyze education, employment, and workplace advancement — all factors that may influence whether individuals form construction or engineering businesses. BBC studied barriers to entry into construction and engineering separately, because entrance requirements and opportunities for advancement differ for those industries.

 $^{^1}$ 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.

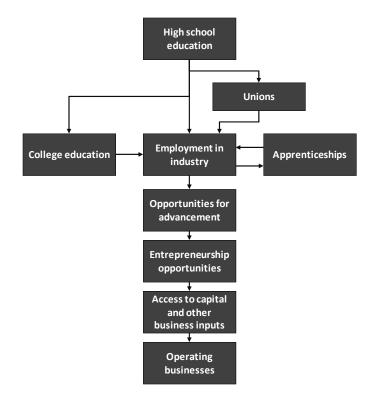
² In Appendix E and other appendices that present information about local marketplace conditions, information for "engineering" refers to architectural, engineering and related services. Each reference to "engineering" work pertains to those types of services. In the 1980 and 2000 Census industrial classification system, "Architectural, engineering and related services" was coded as 882 and 729. In the 2008-2010 ACS, the same industry was coded as 7290.

³ Several other report appendices analyze other quantitative aspects of conditions in the Washington marketplace. Appendix F explores business ownership. Appendix G presents an examination of access to capital. Appendix H considers the success of businesses. Appendix I presents the data sources that the study team used in those appendices.

Figure E-1.
Model for studying entry into the construction and engineering industries

Source:

BBC Research & Consulting.



Representation of minorities among workers and business owners in Washington.

As a starting point, the study team examined the representation of racial/ethnic minorities among workers and business owners in Washington and in the United States as a whole. Figure E-2 shows demographics of the labor force, business owners in all Washington industries, and business owners in the Washington construction and engineering industries, based on 2000 and 2008-2010 data. (Demographics of the construction and engineering industries are considered separately later in Appendix E.). Demographic results for Washington in 2008-2010 indicated the following:

- African Americans accounted for about 4 percent of all workers, 2 percent of all business owners, and 2 percent of business owners in construction and engineering;
- Hispanic Americans accounted for 10 percent of all workers, 6 percent of all business owners, and 5 percent of business owners in construction and engineering;
- Asian-Pacific Americans accounted for about 8 percent of all workers and 6 percent of all business owners, but only 3 percent of construction and engineering business owners;
- Native Americans accounted for approximately 2 percent of all workers and all business owners, but only 1 percent business owners in construction and engineering; and
- Non-Hispanic whites accounted for about 75 percent of all Washington workers, 82 percent of all Washington business owners, and 88 percent of construction and engineering business owners.

Figure E-2.

Demographic distribution of the workforce and business owners, 2000 and 2008-2010

	Workf all ind		Business o		Business o in constru and engine	iction
	2000	2008-10	2000	2008-10	2000	2008-10
Washington	(n=148,859)	(n=101,763)	(n=15,544)	(n=10,971)	(n=2,558)	(n=1,851)
Race/ethnicity						
African American	3.4 %	3.9 %	1.2 % **	2.3 % **	0.6 % **	1.9 % **
Asian-Pacific American	5.9	8.0	5.1 **	6.4 **	2.0 **	3.2 **
Subcontinent Asian American	0.5	1.0	0.4	0.9	0.0	0.4 **
Hispanic American	6.4	9.6	3.5 **	6.1 **	2.4 **	4.6 **
Native American	2.3	2.2	1.6 **	1.7 **	1.5	1.3 **
Other minority group	0.5	0.2	0.6	0.3	0.4	0.3
Total minority	19.0 %	24.9 %	12.2 %	17.7 %	6.9 %	11.7 %
Non-Hispanic white	81.0	75.1	87.8 **	82.3 **	93.1 **	88.3 **
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
Gender						
Female	45.8 %	46.3 %	38.6 % **	40.3 % **	9.6 % **	10.1 % **
Terriale	43.0 /0	40.5 70				89.9 **
Male	54.2	53.7	61.4 **	59.7 **	90.4 **	
Male Total	54.2 100.0 %	53.7	100.0 %	100.0 %	100.0 % Business o	100.0 % wners
	100.0 % Workf all ind	100.0 % orce in ustries	100.0 % Business of in all indu	100.0 %	100.0 % Business o in constru	100.0 % wners
Total	Workf all ind	orce in ustries	Business of in all indu	100.0 % owners ustries 2008-10	Business o in constru	100.0 % wners action eering 2008-10
	100.0 % Workf all ind	100.0 % orce in ustries	100.0 % Business of in all indu	100.0 %	100.0 % Business o in constru	100.0 % wners
Total	Workf all ind	orce in ustries	Business of in all indu	100.0 % owners ustries 2008-10	Business o in constru	100.0 % wners action eering 2008-10
Total United States	Workf all ind	orce in ustries	Business of in all indu	100.0 % owners ustries 2008-10	Business o in constru	100.0 % wners action eering 2008-10
Total United States Race/ethnicity	100.0 % Workf all ind 2000 (n=6,832,970)	100.0 % orce in ustries 2008-10 (n=1,526,154)	Business of in all indu 2000 (n=676,804)	100.0 % owners ustries 2008-10 (n=156,238)	100.0 % Business o in constru and engine 2000 (n=119,227)	100.0 % wners lection eering 2008-10 (n=28,621)
Total United States Race/ethnicity African American	100.0 % Workf all ind 2000 (n=6,832,970)	100.0 % orce in ustries 2008-10 (n=1,526,154)	Business of in all indu 2000 (n=676,804)	100.0 % bowners ustries 2008-10 (n=156,238) 5.9 % **	100.0 % Business o in construand engine 2000 (n=119,227)	100.0 % wners lection eering 2008-10 (n=28,621) 4.7 % **
United States Race/ethnicity African American Asian-Pacific American	100.0 % Workf all ind 2000 (n=6,832,970) 10.9 % 3.4	100.0 % orce in ustries 2008-10 (n=1,526,154) 11.9 % 4.3	Business of in all indu 2000 (n=676,804) 4.9 % **	100.0 % bowners ustries 2008-10 (n=156,238) 5.9 % ** 4.4	30.4 100.0 % Business of in construction and engine 2000 (n=119,227) 4.0 % ** 1.3 **	100.0 % wners loction eering 2008-10 (n=28,621) 4.7 % ** 1.8 **
United States Race/ethnicity African American Asian-Pacific American Subcontinent Asian American	100.0 % Workf all ind 2000 (n=6,832,970) 10.9 % 3.4 0.7	100.0 % orce in ustries 2008-10 (n=1,526,154) 11.9 % 4.3 1.1	Business of in all indu 2000 (n=676,804) 4.9 % ** 3.3 0.7	100.0 % bowners sstries 2008-10 (n=156,238) 5.9 % ** 4.4 1.1	30.4 100.0 % Business of in construction and engine 2000 (n=119,227) 4.0 % ** 1.3 ** 0.2 **	100.0 % wners lection eering 2008-10 (n=28,621) 4.7 % ** 1.8 ** 0.3 **
United States Race/ethnicity African American Asian-Pacific American Subcontinent Asian American Hispanic American	100.0 % Workf all ind 2000 (n=6,832,970) 10.9 % 3.4 0.7 10.7	100.0 % orce in ustries 2008-10 (n=1,526,154) 11.9 % 4.3 1.1 15.0	100.0 % Business of in all indu 2000 (n=676,804) 4.9 % ** 3.3 0.7 7.3 **	100.0 % bowners 2008-10 (n=156,238) 5.9 % ** 4.4 1.1 12.5 **	30.4 100.0 % Business of in construction and engine 2000 (n=119,227) 4.0 % ** 1.3 ** 0.2 ** 7.7 **	100.0 % wners lection eering 2008-10 (n=28,621) 4.7 % ** 1.8 ** 0.3 ** 15.3
United States Race/ethnicity African American Asian-Pacific American Subcontinent Asian American Hispanic American Native American	100.0 % Workf all ind 2000 (n=6,832,970) 10.9 % 3.4 0.7 10.7 1.2	100.0 % orce in ustries 2008-10 (n=1,526,154) 11.9 % 4.3 1.1 15.0 1.1	Business of in all indu 2000 (n=676,804) 4.9 % ** 3.3 0.7 7.3 ** 1.0 **	100.0 % by owners ustries 2008-10 (n=156,238) 5.9 % ** 4.4 1.1 12.5 ** 0.9 **	100.0 % Business o in construand engine 2000 (n=119,227) 4.0 % ** 1.3 ** 0.2 ** 7.7 ** 1.3	100.0 % wners lection eering 2008-10 (n=28,621) 4.7 % ** 1.8 ** 0.3 ** 15.3 1.1
Total United States Race/ethnicity African American Asian-Pacific American Subcontinent Asian American Hispanic American Native American Other minority group	100.0 % Workfall ind 2000 (n=6,832,970) 10.9 % 3.4 0.7 10.7 1.2 0.4	100.0 % orce in ustries 2008-10 (n=1,526,154) 11.9 % 4.3 1.1 15.0 1.1 0.2	Business c in all indu 2000 (n=676,804) 4.9 % ** 3.3 0.7 7.3 ** 1.0 ** 0.5	100.0 % by owners ustries 2008-10 (n=156,238) 5.9 % ** 4.4 1.1 12.5 ** 0.9 ** 0.2	100.0 % Business o in construand engine 2000 (n=119,227) 4.0 % ** 1.3 ** 0.2 ** 7.7 ** 1.3 0.5	100.0 % wners lection eering 2008-10 (n=28,621) 4.7 % ** 1.8 ** 0.3 ** 15.3 1.1 0.3
United States Race/ethnicity African American Asian-Pacific American Subcontinent Asian American Hispanic American Native American Other minority group Total minority	100.0 % Workf all ind 2000 (n=6,832,970) 10.9 % 3.4 0.7 10.7 1.2 0.4 27.3 %	100.0 % orce in ustries 2008-10 (n=1,526,154) 11.9 % 4.3 1.1 15.0 1.1 0.2 33.7 %	Business of in all indu 2000 (n=676,804) 4.9 % ** 3.3 0.7 7.3 ** 1.0 ** 0.5 17.7 %	100.0 % Downers Justries 2008-10 (n=156,238) 5.9 % ** 4.4 1.1 12.5 ** 0.9 ** 0.2 25.0 %	30.4 100.0 % Business of in construand engine 2000 (n=119,227) 4.0 % ** 1.3 ** 0.2 ** 7.7 ** 1.3 0.5 14.9 %	100.0 % wners action eering 2008-10 (n=28,621) 4.7 % ** 1.8 ** 0.3 ** 15.3 1.1 0.3 23.4 %
United States Race/ethnicity African American Asian-Pacific American Subcontinent Asian American Hispanic American Native American Other minority group Total minority Non-Hispanic white	100.0 % Workf all ind 2000 (n=6,832,970) 10.9 % 3.4 0.7 10.7 1.2 0.4 27.3 % 72.7	100.0 % orce in ustries 2008-10 (n=1,526,154) 11.9 % 4.3 1.1 15.0 1.1 0.2 33.7 % 66.3	Business of in all indu 2000 (n=676,804) 4.9 % ** 3.3 0.7 7.3 ** 1.0 ** 0.5 17.7 % 82.3 **	100.0 % Diviners ustries 2008-10 (n=156,238) 5.9 % ** 4.4 1.1 12.5 ** 0.9 ** 0.2 25.0 % 75.0 **	30.4 100.0 % Business of in construand engine 2000 (n=119,227) 4.0 % ** 1.3 ** 0.2 ** 7.7 ** 1.3 0.5 14.9 % 85.1 **	100.0 % wners action eering 2008-10 (n=28,621) 4.7 % ** 1.8 ** 0.3 ** 15.3 1.1 0.3 23.4 % 76.6 **
United States Race/ethnicity African American Asian-Pacific American Subcontinent Asian American Hispanic American Native American Other minority group Total minority Non-Hispanic white Total	100.0 % Workf all ind 2000 (n=6,832,970) 10.9 % 3.4 0.7 10.7 1.2 0.4 27.3 % 72.7	100.0 % orce in ustries 2008-10 (n=1,526,154) 11.9 % 4.3 1.1 15.0 1.1 0.2 33.7 % 66.3	Business of in all indu 2000 (n=676,804) 4.9 % ** 3.3 0.7 7.3 ** 1.0 ** 0.5 17.7 % 82.3 **	100.0 % Diviners ustries 2008-10 (n=156,238) 5.9 % ** 4.4 1.1 12.5 ** 0.9 ** 0.2 25.0 % 75.0 **	30.4 100.0 % Business of in construand engine 2000 (n=119,227) 4.0 % ** 1.3 ** 0.2 ** 7.7 ** 1.3 0.5 14.9 % 85.1 **	100.0 % wners action eering 2008-10 (n=28,621) 4.7 % ** 1.8 ** 0.3 ** 15.3 1.1 0.3 23.4 % 76.6 **
Total United States Race/ethnicity African American Asian-Pacific American Subcontinent Asian American Hispanic American Native American Other minority group Total minority Non-Hispanic white Total Gender	100.0 % Workfall ind 2000 (n=6,832,970) 10.9 % 3.4 0.7 10.7 1.2 0.4 27.3 % 72.7 100.0 %	100.0 % orce in ustries 2008-10 (n=1,526,154) 11.9 % 4.3 1.1 15.0 1.1 0.2 33.7 % 66.3 100.0 %	Business of in all indu 2000 (n=676,804) 4.9 % ** 3.3 0.7 7.3 ** 1.0 ** 0.5 17.7 % 82.3 ** 100.0 %	100.0 % powners ustries 2008-10 (n=156,238) 5.9 % ** 4.4 1.1 12.5 ** 0.9 ** 0.2 25.0 % 75.0 **	100.0 % Business o in construand engine 2000 (n=119,227) 4.0 % ** 1.3 ** 0.2 ** 7.7 ** 1.3 0.5 14.9 % 85.1 **	100.0 % wners lection leering 2008-10 (n=28,621) 4.7 % ** 1.8 ** 0.3 ** 15.3 1.1 0.3 23.4 % 76.6 ** 100.0 %

Note: ** Denotes that the difference in proportions between all workers and business owners (or business owners in study industries) for the given race/ethnicity/gender group is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 2000 U.S. Census 5% sample and 2008-2010 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/.

Patterns that the study team observed in Washington related to the racial/ethnic composition of workers and business owners were similar to those observed in the United States, with the following exceptions:

- African Americans and Hispanic Americans made up smaller percentages of the overall workforce and of business owners in Washington than in the United States;
- Asian-Pacific Americans accounted for larger percentages of the overall workforce and of business owners in Washington than in the United States; and

■ The percentage of construction and engineering business owners who are Hispanic Americans in the United States is similar to the representation of Hispanic Americans in the United States workforce. However, in Washington, a smaller percentage of construction and engineering business owners are Hispanic Americans than might be expected given their representation in the Washington workforce.

Representation of women among workers and business owners in Washington.

Figure E-2 also presents the percentage of workers and business owners that were made up of women in 2008-2010, both in Washington and in the United States. In 2008-2010, women accounted for about 46 percent of the Washington labor force and 40 percent of all business owners. However, women only accounted for 10 percent of business owners in the construction and engineering industries during those years.

Construction Industry

BBC examined how education, training, employment, and advancement may affect the number of businesses that individuals of different races/ethnicities and genders owned in the Washington construction industry in 2000 and in 2008 through 2010.

Education. Formal education beyond high school is not a prerequisite for most construction jobs. For that reason, the construction industry often attracts individuals who have relatively low levels of educational attainment. Most construction industry employees in Washington do not have a four-year college degree. Based on the 2008-2010 ACS, 35 percent of workers in the Washington construction industry were high school graduates with no post-secondary education and 15 percent had not finished high school. Only 14 percent of those working in the Washington construction industry had a four-year college degree or higher, compared to 31 percent of all workers.

Race/ethnicity. Hispanic Americans represented an especially large pool of Washington workers with no post-secondary education. In 2000, only 13 percent of all Hispanic American workers 25 and older who worked in Washington held at least a four-year college degree. That figure rose slightly to 14 percent in 2008 through 2010, but was still far below the figure for non-Hispanic whites working in the region (36%). The percentage of African American (25%) and Native American (21%) workers in Washington with a four-year college degree was also substantially lower than that of non-Hispanic whites in 2008 through 2010. Based on educational requirements of entry-level jobs and the limited education beyond high school for many African Americans, Native Americans, and Hispanic Americans in Washington, one would expect a relatively high representation of those groups in the Washington construction industry, especially in entry-level positions.

In contrast to African Americans, Hispanic Americans, and Native Americans, a substantial proportion of Asian-Pacific American workers 25 and older (43%) and Subcontinent Asian American workers 25 and older (76%) in Washington had four-year college degrees in 2008 through 2010. Given the relatively high levels of education for Asian-Pacific Americans and Subcontinent Asian Americans in Washington, the representation of those groups in the Washington construction industry might be lower than that of non-Hispanic whites.

Gender. In Washington, female workers age 25 or older achieve a similar level of education, on average, as men. Based on 2008 through 2010 data, 35 percent of female workers and 34 percent of male workers age 25 and older had at least a four-year college degree.

Apprenticeship and training. Training in the construction industry is largely on-the-job and through trade schools and apprenticeship programs. Entry-level jobs for workers out of high school are often for laborers, helpers, or apprentices. More 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, or other groups.

Workers can enter apprenticeship programs from high school or trade school. Apprenticeships have traditionally been three- to five-year programs that combine on-the-job training with classroom instruction.⁴ Opportunities for those programs across race/ethnicity are discussed later in Appendix E.

Employment. With educational attainment for minorities and women as context, the study team examined employment in the Washington construction industry. Figure E-3 presents data from 1980, 2000, and 2008-2010 to compare the demographic composition of the construction industry with the total workforce in both Washington and in the United States.

Race/ethnicity. Based on 2008-2010 ACS data, 20 percent of people working in the Washington construction industry were minorities, compared to only 13 percent in 2000. Much of that increase was due to growth in the number of Hispanic American construction workers. An examination of the Washington construction industry workforce in 2008 through 2010 shows that:

- 12 percent was made up of Hispanic Americans;
- 3 percent was made up of Asian-Pacific Americans;
- 2 percent was made up of African Americans;
- 2 percent was made up of Native Americans; and
- Less than 1 percent was made up of Subcontinent Asian Americans.

In Washington, Hispanic Americans made up a larger percentage of workers in construction (12%) than in the entire workforce as a whole (10%). In contrast, African Americans, Asian-Pacific Americans, and Subcontinent Asian Americans made up smaller percentages of worked in the construction industry than in the entire workforce as a whole.

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⁴ 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)

Figure E-3.

Demographics of workers in construction and all industries, 1980, 2000 and 2008-2010

		All industries			Construction	
	1980	2000	2008-10	1980	2000	2008-2010
Washington	(n= 99,341)	(n=148,859)	(n=101,763)	(n=7,147)	(n=10,598)	(n=7,231)
Race/ethnicity						
African American	2.5 %	3.4 %	3.9 %	1.4 % **	1.8 % **	2.2 % **
Asian-Pacific American	2.4	5.9	8.0	0.5 **	1.9 **	2.8 **
Subcontinent Asian American	0.1	0.5	1.0	0.1	0.0	0.1 **
Hispanic American	2.7	6.4	9.6	2.0 **	5.7	11.9 **
Native American	1.3	2.3	2.2	1.5	2.7	2.3
Other minority group	0.1	0.5	0.2	0.1	0.6	0.3
Total minority	9.0 %	19.0 %	24.9 %	5.7 %	12.6 %	19.6 %
Non-Hispanic white	91.0	81.0	75.1	94.3 **	87.4 **	80.4 **
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
Gender						
Female	40.8 %	45.8 %	46.3 %	8.7 % **	11.8 % **	11.6 % **
Male	59.2	54.2	53.7	91.3 **	88.2 **	88.4 **
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
		All industries			Construction	
	1980	2000	2008-10	1980	2000	2008-2010
United States	(n=5,287,471)	(n=6,832,970)	(n=1,526,154)	(n=330,464)	(n=480,280)	(n=103,192)
Race/ethnicity						
African American	10.1 %	10.9 %	11.9 %	7.4 % **	6.2 % **	6.1 % **
Asian-Pacific American	1.4	3.4	4.3	0.6 **	1.2 **	1.6 **
Subcontinent Asian American	0.2	0.7	1.1	0.1 **	0.2 **	0.2 **
Hispanic American	5.7	10.7	15.0	5.9 **	15.0 **	23.9 **
Native American	0.6	1.2	1.1	0.9 **	1.6 **	1.4 **
Other minority group	0.1	0.4	0.2	0.1	0.4	0.2
Total minority	18.1 %	27.3 %	33.7 %	14.9 %	24.5 %	33.5 %
Non-Hispanic white	81.9	72.7	66.3	85.1 **	75.5 **	66.5
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
Gender						
Female	42.2 %	46.5 %	47.2 %	0.8 % **	9.9 % **	9.2 % **
Male	57.8	53.5	52.8	92.1 **	90.1 **	90.8 **
Total	100.0 %	100.0 %	100.0 %	92.9 %	100.0 %	100.0 %

Note: ** Denotes that the difference in proportions between workers in the construction industry and all industries 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 2008-2010 ACS Public Use Microdata samples. The raw data extracts were obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

Average educational attainment of African Americans is consistent with requirements for construction jobs, so education does not explain the relatively low number of African American workers in the Washington construction industry. Several studies throughout the United States have argued that race discrimination by construction unions has contributed to the low employment of African Americans in construction trades. Some of the evidence for and against that position is discussed later in Appendix E.

⁵ Waldinger, Roger and Thomas Bailey. 1991. "The Continuing Significance of Race: Racial Conflict and Racial Discrimination in Construction." *Politics & Society*, 19(3).

Asian-Pacific Americans made up 3 percent of the construction workforce and 8 percent of all workers in Washington in 2008 through 2010. The fact that Asian-Pacific Americans were more likely than other groups to go to college in 2008 through 2010 may explain part of that difference.

Overall, the percentage of construction workers who are minorities has increased in Washington over the past three decades (6% in 1980, 13% in 2000, and 20% in 2008-2010), as has the percentage of all Washington workers who are minorities (9% in 1980, 19% in 2000, and 25% in 2008-2010).

Gender. There were large differences between the percentage of all workers who were women and the percentage of construction workers who were women in Washington in 2008 through 2010. During those years, women represented 46 percent of all workers in Washington but only 12 percent of construction workers. That difference was similar to differences shown for the United States as a whole.

Academic research concerning the affect of race- and gender-based discrimination.

There is substantial academic literature that has examined whether race- or gender-based discrimination affects opportunities for minorities and women to enter construction trades in the United States. Many studies indicate that race- and gender-based discrimination affects opportunities for minorities and women in the construction industry. The literature concerning women in construction trades has identified substantial barriers to entry and advancement due to gender discrimination and sexual harassment.⁶ Research concerning highway construction projects in three major U.S. cities (Boston, Los Angeles, and Oakland) identified evidence of prevailing attitudes that women do not belong in construction, and that such discrimination was worse for women of color than for white women.⁷

Importance of unions to entry in the construction industry. Labor researchers characterize construction as a historically volatile industry that is 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 relatively high turnover of laborers presents a disincentive for construction firms to invest in training. Some researchers 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

⁶ See, for example, Erickson, Julia A and Donna E. Palladino. 2009. "Women Pursuing Careers in Trades and Construction." *Journal of Career Development*. 36(1): 68-89.

⁷ Note that those interviews took place between 1996 and 1999. Price, Vivian, 2002. "Race, Affirmative Action and Women's Participation in U.S. Highway Construction." *Feminist Economics*. 8(2), 87-113.

⁸ Applebaum, Herbert. 1999. Construction Workers, U.S.A. Westport: Greenwood Press.

⁹ Waldinger, Roger and Thomas Bailey. 1991. "The Continuing Significance of Race: Racial Conflict and Racial Discrimination in Construction." *Politics & Society*, 19(3).

white social networks, African Americans and other minorities faced long-standing historical barriers to entering into the industry.¹⁰

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 Americans and other underrepresented groups into the industry. However, some researchers have identified racial discrimination by trade unions that has historically prevented minorities from obtaining employment in skilled trades. Some researchers argue that union discrimination has taken place in a variety of forms, including the following examples:

- Unions have used admissions criteria that adversely affect minorities. In the 1970s, federal courts ruled that standardized testing requirements for unions unfairly disadvantaged minority applicants who had less exposure to testing. In addition, the policies that required new union members to have relatives who were already in the union perpetuated the effects of past discrimination.¹²
- Of those minority individuals who are admitted to unions, a disproportionately low number are admitted into union-coordinated apprenticeship programs. Apprenticeship programs are an important means of producing skilled construction laborers, and the reported exclusion of African Americans from those programs has severely limited their access to skilled occupations in the construction industry.¹³
- 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 that practice favors a white-dominated status quo.¹⁴
- 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.¹⁵

¹⁰ Feagin, Joe R. and Nikitah Imani. 1994. "Racial Barriers to African American Entrepreneurship: An Exploratory Study." Social Problems. 41(4): 562-584.

¹¹ U.S. Department of Justice. 1996. Proposed Reforms to Affirmative Action in Federal Procurement. 61 FR 26042.

¹² *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).

¹³ Applebaum. 1999. Construction Workers, U.S.A.

¹⁴ *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.

 $^{^{15}}$ Waldinger and Bailey. 1991. "The Continuing Significance of Race: Racial Conflict and Racial Discrimination in Construction."

- 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.¹⁶
- 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.¹⁷

However, more recent research suggests that the relationship between minorities and unions has been changing. As a result, historical observations may not be indicative of current dynamics in construction unions. Recent studies focusing on the role of unions in apprenticeship programs have compared minority and female participation and graduation rates for apprenticeships in joint programs (that unions and employers organize together) with rates in employer-only programs. Many of those studies conclude that the impact of union involvement is generally positive or neutral for minorities and women, compared to non-Hispanic white males:

- Glover and Bilginsoy (2005) analyzed apprenticeship programs in the U.S. construction industry during the period 1996 through 2003. Their dataset covered about 65 percent of apprenticeships during that time. The authors found that joint programs had "much higher enrollments and participation of women and ethnic/racial minorities" and exhibited "markedly better performance for all groups on rates of attrition and completion" compared to employer-run programs.¹⁸
- In a similar analysis focusing on female apprentices, Bilginsoy and Berik (2006) found that women were most likely to work in highly-skilled construction professions as a result of enrollment in joint programs as opposed to employer-run programs. Moreover, the effect of union involvement in apprenticeship training was higher for African American women than for white women.¹⁹
- A recent study on the presence of African Americans and Hispanic Americans in apprenticeship programs found that African Americans were 8 percent more likely to be enrolled in a joint program than in an employer-run program. However, Hispanic Americans were less likely to be in a joint program than in an employer-run program.²⁰ Those data suggest that Hispanic Americans may be more likely than African Americans to enter the construction industry without the support of a union.

¹⁶ 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).

¹⁷ Feagin and Imani. 1994. "Racial Barriers to African American Entrepreneurship: An Exploratory Study." *Social Problems.* 41 (4): 562-584.

¹⁸ Glover, Robert and Bilginsoy, Cihan. 2005. "Registered Apprenticeship Training in the U.S. Construction Industry." *Education & Training*, Vol. 47, 4/5, p 337.

¹⁹ Günseli Berik, Cihan Bilginsoy. 2006. "Still a wedge in the door: women training for the construction trades in the USA", *International Journal of Manpower*, Vol. 27 Iss: 4, pp.321 – 341.

²⁰ Bilginsoy, Cihan. 2005. "How Unions Affect Minority Representation in Building Trades Apprenticeship Programs." *Journal of Labor Research*, *57*(1).

Other data also indicate a more productive relationship between construction unions and minority workers than that which may have prevailed in the past. For example, 2007 Current Population Survey (CPS) data indicate that union membership rates for both African Americans and Hispanic Americans are similar to those of non-Hispanic whites. The CPS asked participants, "Are you a member of a labor union or of an employee association similar to a union?" CPS data showed union membership for African Americans in construction to be 11 percent and for non-Hispanic whites to be 12 percent — not a statistically significant difference. In contrast, the CPS showed that only 7 percent of Hispanic Americans are union members.

Although union membership and union program participation varies based on race/ethnicity, the causes of those differences and their effects on construction industry employment are unresolved. Research is especially limited on the impact of unions on Asian American employment. It is unclear from past studies whether unions presently help or hinder equal opportunity in construction and whether effects in Washington are different from other parts of the country. In addition, the current research indicates that the effects of unions on entry into the construction industry may be different for different minority groups.

Advancement. To research opportunities for advancement in the Washington construction industry, the study team examined the representation of minorities and women in construction occupations defined by the U.S. Bureau of Labor Statistics.²² Appendix I provides full descriptions of construction trades with large enough sample sizes in the 2000 Census and 2008-2010 ACS for the study team to analyze.

Racial/ethnic composition of construction occupations. Figures E-4 and E-5 present the race/ethnicity of workers in select construction-related occupations in Washington, including low-skill occupations (e.g., construction laborers), higher-skill construction trades (e.g., electricians), and supervisory roles. Figure E-4 and E-5 present those data for 2000 and 2008 through 2010, respectively.

Based on 2000 Census and 2008-2010 ACS data, there are large differences in the racial/ethnic makeup of workers in various trades related to construction in Washington. Overall, minorities comprised 13 percent of construction workers in 2000 and 20 percent in 2008 through 2010. Minorities comprised a relatively large percentage of laborers working as:

- Construction laborers (22% in 2000 and 30% in 2008 through 2010);
- Plasterers and stucco masons (25% in 2000 and 42% in 2008 through 2010);
- Helpers (39% in 2000 and 47% in 2008 through 2010);
- Roofers (25% in 2000 and 38% in 2008-2010);
- Painters (20% in 2000 and 39% in 2008-2010); and
- Drywall, ceiling tile installers, and tapers (20% in 2000 and 50% in 2008-2010).

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²¹ 2007 Current Population Survey (CPS), U.S. Census Bureau and Bureau of Labor Statistics.

²² 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).

All construction workers (n=10,598) 13% 2000 Plasterers and stucco masons (n=24) 25% Helpers (n=23) 23% 39% Cement masons and terrazzo workers (n=83) 19% Roofers (n=226) 25% 8% Painters (n=413) 20% Drywall installers, ceiling tile installers, and tapers (n=282) 20% Brickmasons, blockmasons and stonemasons (n= 125) 11% Carpet, floor and tile installers and finishers (n=168) 15% 11% Carpenters (n=1,645) Drivers, sales workers and truck drivers (n=273) Pipelayers, plumbers, pipefitters, and steamfitters (n=386) Iron and steel workers (n=65) 11% 13% 2%** Electricians (n=532) 7% 1%** Miscellaneous construction equipment operators (n=456) 9% 10% Hispanic Americans Sheet metal workers (n=99) All other minorities 5% First-line supervisors (n=902) 9%

Figure E-4.
Minorities as a percentage of selected construction occupations in Washington, 2000

Note: ** Denotes that the difference in proportions between all workers in the construction industry and those in specific occupations is statistically significant at the 95% confidence level.

10%

Crane and tower operators, dredge, excavating and loading machine and dragline operators, paving, surfacing and tamping equipment operators and miscellaneous construction equipment operators were combined into the single category of machine operators.

20%

30%

40%

100%

Source: BBC Research & Consulting from 2000 U.S. Census 5% sample 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/.

Some occupations had relatively low representations of minorities:

- Drivers, sales workers and truck drivers (11% in 2000 and 10% in 2008 through 2010);
- Electricians (9% in 2000 and 10% in 2008 through 2010);
- Equipment operators (10% in 2000 and 13% in 2008 through 2010); and
- Sheet metal workers (8% in 2000 and 9% in 2008 through 2010).

All construction workers (n=7,231) 20% 2000 Laborers (n=883) Plasterers and stucco masons (n=18) Helpers (n=23) 47% Cement masons and terrazzo workers (n=56) Roofers (n=61) 38% Painters (n=288) 39% 2%** Drywall installers, ceiling tile installers, and tapers (n=112) 50% Brickmasons, blockmasons and stonemasons (n= 65) 15% Carpet, floor and tile installers and finishers (n=113) 30% 8% 22% Carpenters (n=992) 23% 15% 9% Drivers, sales workers and truck drivers (n=122) 6% Pipelayers, plumbers, pipefitters, and steamfitters (n=270) 19% Iron and steel workers (n=46) 12% 17% Electricians (n=302) Miscellaneous construction equipment operators (n=264) 13% Hispanic Americans Sheet metal workers (n=42) All other minorities First-line supervisors (n=577) 11% 0% 10% 20% 30% 40% 50% 100%

Figure E-5.
Minorities as a percentage of selected construction occupations in Washington, 2008-2010

Note: ** Denotes that the difference in proportions between all workers in the construction industry and those in specific occupations is statistically significant at the 95% confidence level.

Crane and tower operators, dredge, excavating and loading machine and dragline operators, paving, surfacing and tamping equipment operators and miscellaneous construction equipment operators were combined into the single category of machine operators.

Source: BBC Research & Consulting from 2008-2010 American Community Survey data. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

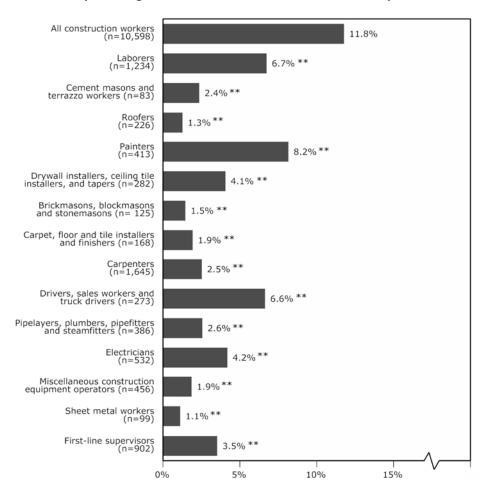
About 9 percent of first-line supervisors were minorities in 2000, less than the total percentage of Washington construction workers who were minorities (13%). Minorities made up a larger percentage of first-line supervisors (11%) in 2008 through 2010, but that percentage was still less than the total percentage of construction workers who were minorities during those years (20%).

Most minorities working in the Washington construction industry in 2008 through 2010 were Hispanic Americans. The representation of Hispanic Americans was substantially larger among construction laborers (19%) and helpers (40%) than among all construction workers (12%).

Those occupations tend to be low-skill occupations. Only 6 percent of first-line supervisors were Hispanic American in Washington in 2008 through 2010,

Gender composition of construction occupations. The study team also analyzed the proportion of women in construction-related occupations. Figures E-6 and E-7 summarize the gender of workers in select construction-related occupations for 2000 and 2008-2010, respectively. Overall, only 12 percent of construction workers in Washington were women in 2000 and in 2008 through 2010.

Figure E-6.
Women as a percentage of construction workers in selected occupations in Washington, 2000

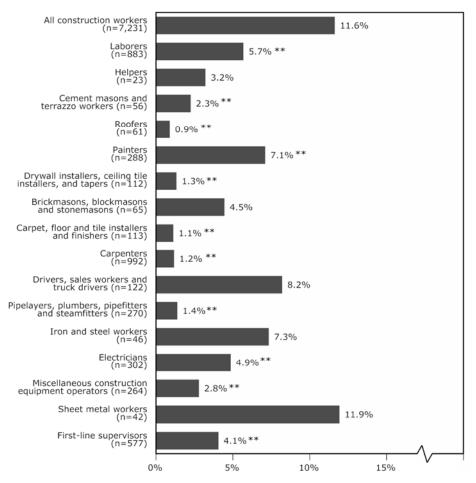


Note: ** Denotes that the difference in proportions between all workers in the construction industry and those in specific occupations is statistically significant at the 95% confidence level.

Crane and tower operators, dredge, excavating and loading machine and dragline operators, paving, surfacing and tamping equipment operators and miscellaneous construction equipment operators were combined into the single category of machine operators.

Source: BBC Research & Consulting from 2000 U.S. Census 5% sample 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/.

Figure E-7.
Women as a percentage of construction workers in selected occupations in Washington, 2008-2010



Note: ** Denotes that the difference in proportions between all workers in the construction industry and those in specific occupations is statistically significant at the 95% confidence level.

Crane and tower operators, dredge, excavating and loading machine and dragline operators, paving, surfacing and tamping equipment operators and miscellaneous construction equipment operators were combined into the single category of machine operators.

Source: BBC Research & Consulting from 2008-2010 American Community Survey data. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

In both 2000 and 2008 through 2010, less than 3 percent of workers were women in the following trades:

- Cement masons and terrazzo workers;
- Roofers;
- Carpet, floor and tile installers and finishers;
- Carpenters;
- Pipelayers, plumbers, pipefitters, and steamfitters; and
- Equipment operators.

Among all of the individual occupations listed in Figures E-6 and E-7, the following occupations showed an increase in the representation of women between 2000 and 2008 through 2010:

- Brickmasons, blockmasons, and stonemasons;
- Drivers, sales workers, and truck drivers;
- Iron and steel workers;
- Electricians:
- Equipment operators;
- Sheet metal workers; and
- First-line supervisors.

Percentage of minorities and women who are managers. To further assess advancement opportunities for minorities and women in the Washington construction industry, the study team examined differences between demographic groups in the proportion of construction workers who reported being managers. Figure E-8 presents the percentage of construction workers who reported being construction managers in 1980, 2000, and 2008-2010 for Washington and the nation, by racial/ethnic and gender group.

Figure E-8.
Percentage of
construction workers
who worked as a
manager, 1980, 2000
and 2008-2010

Note:

** Denotes that the difference in proportions between the minority group and non-Hispanic whites (or between females and males) for the given Census/ACS year is statistically significant at the 95% confidence level.

Source:

BBC Research & Consulting from the 2000 U.S. Census 5% sample and 2008-2010 ACS Public Use Microdata samples. The raw data extracts were obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/L.

Washington	1980	2000	2008-2010
Race/ethnicity			
African American	5.0 %	1.9 % **	4.5 % *
Asian-Pacific American	2.6	5.5	7.1
Hispanic American	2.8	1.9 **	3.3 *
Native American	1.9 **	4.3	7.9
Subcontinent Asian and other minority	0.0	7.9	0.0
Non-Hispanic white	5.2	9.2	10.6
Gender			
Female	6.4 %	4.7 % **	5.6 %
Male	4.9	8.9	9.9
All individuals	10.1 %	8.4 %	9.4 %
United States	1980	2000	2008-2010
	1980	2000	2008-2010
	1980 1.5 % **	2000 3.1 % **	
Race/ethnicity			3.9 % 3
Race/ethnicity African American	1.5 % **	3.1 % **	3.9 % °
Race/ethnicity African American Asian-Pacific American	1.5 % ** 4.2	3.1 % ** 7.7	3.9 % ° 7.7 ° 2.8 °
Asian-Pacific American Hispanic American	1.5 % ** 4.2 2.0 **	3.1 % ** 7.7 2.5 **	3.9 % * 7.7 * 2.8 *
Race/ethnicity African American Asian-Pacific American Hispanic American Native American	1.5 % ** 4.2 2.0 ** 2.5 **	3.1 % ** 7.7 2.5 ** 4.6 **	3.9 % 3 7.7 2 2.8 3 7.3 3
Race/ethnicity African American Asian-Pacific American Hispanic American Native American Subcontinent Asian and other minority	1.5 % ** 4.2 2.0 ** 2.5 **	3.1 % ** 7.7 2.5 ** 4.6 **	3.9 % 3 7.7 3 2.8 3 7.3 3
Race/ethnicity African American Asian-Pacific American Hispanic American Native American Subcontinent Asian and other minority Non-Hispanic white	1.5 % ** 4.2 2.0 ** 2.5 **	3.1 % ** 7.7 2.5 ** 4.6 **	3.9 % ° 7.7 ° 2.8 ° 7.3 ° 7.4 9.2
Race/ethnicity African American Asian-Pacific American Hispanic American Native American Subcontinent Asian and other minority Non-Hispanic white	1.5 % ** 4.2 2.0 ** 2.5 ** 5.3 4.9	3.1 % ** 7.7 2.5 ** 4.6 ** 7.8 7.5	3.9 % * 7.7 * 2.8 * 7.3 * 7.4

Racial/ethnic composition of managers. Overall, the proportion of construction workers who were managers increased between 2000 and 2008 through 2010. In 2008 through 2010, about 11 percent of non-Hispanic whites in the Washington construction industry were managers. Compared with non-Hispanic whites, a smaller percentage of all minority groups were managers in the Washington construction industry:

- About 5 percent of African Americans working in the Washington construction industry were managers;
- About 3 percent of Hispanic Americans were managers;
- About 8 percent of Native Americans were managers (not a statistically significant difference from non-Hispanic whites);
- About 7 percent of Asian-Pacific Americans were managers (not a statistically significant difference from non-Hispanic whites); and
- There were no Subcontinent Asian American or other minority managers in the dataset.

The percentages of African American, Hispanic American, and Native American workers in the construction industry who were managers was higher in Washington than in the United States.

Gender composition of managers. Female construction workers were less likely than their male counterparts to be managers in both 2000 and in 2008 through 2010. In 2008 through 2010, 6 percent of female construction workers were managers in Washington compared to 10 percent of male construction workers.

Engineering Industry

BBC also examined how education and employment may potentially influence the number of minority and female entrepreneurs working in the Washington engineering industry.

Education. In contrast to the construction industry, lack of educational attainment may preclude workers' entry into the engineering industry because many occupations require at least a four-year college degree and some require licensure. According to the 2008-2010 ACS, 64 percent of individuals working in the Washington engineering industry had at least a four-year college degree. Eighty-two percent of civil engineers had at least a four-year college degree. Therefore, barriers to education can restrict employment opportunities, advancement opportunities, and, ultimately, business ownership. Any disparities in business ownership rates in engineering-related work could have resulted from the lack of sufficient education for particular race/ethnicity and gender groups.²³

Based on 2000 Census data and 2008-2010 ACS data, Figure E-9 presents the percentage of workers age 25 and older with at least a four-year college degree in Washington and the United States. The level of education necessary to work in the engineering industry may partially restrict employment opportunities for African Americans, Hispanic Americans, and Native Americans. For each of those groups, the percentage of workers age 25 or older with a

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²³ Feagin, Joe R. and Nikitah Imani. 1994. "Racial Barriers to African American Entrepreneurship: An Exploratory Study." *Social Problems*. 42 (4): 562-584.

bachelor's degree or higher was substantially lower than that of non-Hispanic whites in Washington and in the United States for 2000 and 2008 through 2010.

Figure E-9.
Percentage of all workers 25 and older with at least a four-year degree, 2000 and 2008-2010

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 2008-2010 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/.

Washington	2000	2008-2010
Race/ethnicity		
African American	24.5 % **	24.7 % **
Asian-Pacific American	39.7 **	43.1 **
Subcontinent Asian American	64.7 **	76.2 **
Hispanic American	12.8 **	13.5 **
Native American	17.7 **	21.3 **
Other minority group	27.2	32.9
Non-Hispanic white	33.7	36.4
Non-mapanic write	33.7	30.4
Gender		
Female	31.7 % **	34.9 %
Male	32.8	34.3
United States	2000	2008-2010
United States Race/ethnicity	2000	2008-2010
	2000 19.1 % **	2008-2010
Race/ethnicity		
Race/ethnicity African American	19.1 % **	22.4 % **
Race/ethnicity African American Asian-Pacific American	19.1 % ** 45.4 **	22.4 % ** 49.1 **
Race/ethnicity African American Asian-Pacific American Subcontinent Asian American	19.1 % ** 45.4 ** 68.4 **	22.4 % ** 49.1 ** 74.0 **
Race/ethnicity African American Asian-Pacific American Subcontinent Asian American Hispanic American	19.1 % ** 45.4 ** 68.4 ** 13.4 **	22.4 % ** 49.1 ** 74.0 ** 15.2 **
Race/ethnicity African American Asian-Pacific American Subcontinent Asian American Hispanic American Native American	19.1 % ** 45.4 ** 68.4 ** 13.4 ** 17.3 **	22.4 % ** 49.1 ** 74.0 ** 15.2 ** 21.0 **
Race/ethnicity African American Asian-Pacific American Subcontinent Asian American Hispanic American Native American Other minority group	19.1 % ** 45.4 ** 68.4 ** 13.4 ** 17.3 ** 30.0 **	22.4 % ** 49.1 ** 74.0 ** 15.2 ** 21.0 ** 39.2 **
Race/ethnicity African American Asian-Pacific American Subcontinent Asian American Hispanic American Native American Other minority group Non-Hispanic white	19.1 % ** 45.4 ** 68.4 ** 13.4 ** 17.3 ** 30.0 **	22.4 % ** 49.1 ** 74.0 ** 15.2 ** 21.0 ** 39.2 **

Race/ethnicity. In Washington, about 35 percent of all non-Hispanic white workers age 25 and older had at least a four-year degree in 2008 through 2010. For other racial/ethnic groups, the data for Washington indicated that:

- About 25 percent of African Americans had at least a four-year college degree;
- Only 14 percent of Hispanic Americans had at least a four-year college degree; and
- About 21 percent of Native Americans had at least a four-year college degree.

Some minority groups in Washington were more likely than non-Hispanic whites to be college graduates in 2008 through 2010 — 43 percent of Asian-Pacific Americans and 76 percent of Subcontinent Asian Americans had at least a four-year college degree. In both Washington and the United States as a whole, all minority groups showed an increase between 2000 and 2008 through 2010 in the proportion of workers with a bachelor's degree.

Gender. In Washington in 2000, about 32 percent of women and 33 percent of men had at least a four-year college degree. In 2008 through 2010, 35 percent of women and 34 percent of men had a bachelor's degree.

Additional indices of educational attainment. Additional indices of educational attainment. A 2010 report by the National Center for Education Statistics examined the educational attainment and performance of students in the United States by race/ethnicity. Despite increases in the number of students of each race/ethnicity group who have completed high school and have pursued a postsecondary education, disparities persist in a number of key performance indicators among non-Hispanic whites, Asian Americans, African Americans, Hispanic Americans, and Native Americans.

Some of the results from the report that were related to high school student achievement include the following:

- Reading. On the 2007 National Assessment of Educational Progress (NAEP) reading assessment, 40 percent of non-Hispanic white 8th graders scored at or above "proficient," compared to only 13 percent of African American, 15 percent of Hispanic American, and 18 percent of Native American 8th grade students. The percentage of Asian American 8th graders who exhibited "proficient" scores (41%) was similar to that of non-Hispanic whites. Results for 12th graders were similar higher percentages of non-Hispanic white (43%) and Asian American (36%) students scored at or above "proficient" compared with their African American (16%), Hispanic (20%) and Native American (26%) peers.
- Mathematics. On the NAEP mathematics assessment conducted in 2009 (for 8th graders) and 2005 (for 12th graders), a higher proportion of Asian American students in both 8th and 12th grade scored at or above "proficient" than all other racial/ethnic groups. Among 8th graders, 54 percent of Asian American students met the proficiency benchmark compared to 44 percent of non-Hispanic white, 12 percent of African American, 17 percent of Hispanic, and 18 percent of American Indian/Alaska Native students. Proficiency was lower for all groups in 12th grade but similar disparities persisted.
- College readiness. Diversity among SAT and ACT college entrance exam test-takers increased substantially between1998 and 2008 but differences in performance on those exams persisted. Average scores for non-Hispanic whites and Asian Americans were substantially higher than scores for African Americans, Hispanic Americans, and Native Americans. The same organization that administers the ACT also measures "college readiness" in English, Mathematics, Reading, and Science using a benchmark score the minimum score in each subject area that indicates a 50 percent chance of obtaining a "B" or higher or a 75 percent chance of obtaining a "C" or higher in corresponding college-level courses. A higher percentage of Asian Americans (33%) and non-Hispanic whites (27%) who took the ACT in 2008 met the benchmark score in all four subject areas than any other racial/ethnic group. Only 3 percent of African Americans, 10 percent of Hispanic Americans, and 11 percent of Native Americans taking the ACT met the college readiness benchmark in all four subjects.²⁴

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 $^{^{24}}$ BBC examined college readiness benchmarks for Washington students taking the ACT in 2010-2011 and results were similar

The report also considered trends in postsecondary education among different racial/ethnic groups:

- College participation. The college participation rate, defined as the percentage of 18 to 24 year olds enrolled in 2-year or 4-year colleges or universities, was higher in 2008 than in 1980 for non-Hispanic whites, African Americans, and Hispanic Americans. Even so, the participation rate in 2008 for non-Hispanic whites (44%) was substantially higher than for African Americans (32%), Hispanic Americans (26%), and Native Americans (22%). Although there was no measurable increase in the college participation rate for Asian Americans between 1990 and 2008, that group maintained the highest overall college participation rate at 58 percent.²⁵
- Engineering-related degrees. Approximately 5 percent of all bachelor's degrees awarded in 2007 through 2008 were in engineering and engineering technologies. Asian Americans exhibited the highest percentage of bachelor's degrees awarded in engineering (9%) and African Americans exhibited the lowest (3%). Four percent of bachelor's degrees awarded to Hispanic Americans and Native Americans and 5 percent of bachelor's degrees awarded to non-Hispanic whites were in engineering and engineering technologies. Those trends were similar for masters and doctoral degrees.

Employment. After consideration of educational opportunities and attainment for minorities and women, the study team examined the race/ethnicity and gender composition of workers in the engineering industry in Washington. Figure E-10 compares the demographic composition of workers in the Washington engineering industry to that of all workers in Washington who are 25 years or older and have a college degree. Results are presented for 1980, 2000, and 2008-2010.

Race/ethnicity. In 2008 through 2010, about 16 percent of the workforce in the Washington engineering industry was made up of minorities. Of that workforce:

- About 2 percent was made up of African Americans;
- About 8 percent was made up of Asian-Pacific Americans;
- About 1 percent was made up of Subcontinent Asian Americans;
- About 4 percent was made up of Hispanic Americans; and
- About 1 percent was made up of Native Americans.

Other minorities comprised approximately one-half of one percent of the Washington engineering workforce in 2008 through 2010.

In 2008 through 2010, all minorities considered together comprised a smaller percentage of workers in engineering-related industries (16%) than of all workers 25 and older with a four-year college degree (20%). In particular, Asian-Pacific Americans made up 10 percent of workers with a four-year college degree but only 8 percent of workers in the engineering industry. Subcontinent Asian Americans made up 2 percent of workers with a college degree but

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 $^{^{\}rm 25}$ College participation data for Asian Americans were not available for 1980.

only 1 percent of engineering workers. African Americans also showed a smaller representation among engineers (2%) than they did among all workers with a college degree (3%). However, Hispanic Americans and Native Americans comprised a similar percentage of workers in the engineering industry and of workers with a college degree in all industries.

Figure E-10.

Demographic distribution of engineering-related workers and workers age 25 and older with a four-year college degree in all industries, 1980, 2000 and 2008-2010

	Wor	kers 25+ with colleg	e degree	Engin	eering industry wor	kforce
- Washington	1980 (n=18,139)	2000 (n=38,976)	2008-10 (n=32,275)	1980 (n=744)	2000 (n=1,745)	2008-10 (n=1,360)
Race/ethnicity						
African American	1.5 %	2.4 %	2.6 %	0.9 %	1.1 % **	1.6 % **
Asian-Pacific American	3.6	7.1	9.9	5.6 **	7.1	7.8 **
Subcontinent Asian American	0.2	1.0	2.3	0.1	1.0	0.9 **
Hispanic American	1.2	2.2	3.5	1.1	2.7	3.5
Native American	0.5	1.2	1.3	0.9	1.1	1.4
Other minority group	0.1	0.4	0.2	0.5	0.4	0.5
Total minority	7.1 %	14.4 %	19.8 %	9.3 %	13.4 %	15.8 %
Non-Hispanic white	92.9	85.6	80.2	90.7 **	86.6	84.2 **
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
Gender						
Female	33.0 %	44.5 %	46.4 %	20.8 % **	28.5 % **	29.7 % **
Male	67.0	55.5	53.6	79.2 **	71.5 **	70.3 **
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
	Worke	ers 25+ with college	degree	Enginee	ring industry workfo	orce
-	1980	2000	2008-10	1980	2000	2008-10
United States	(n=858,511)	(n=1,631,919)	(n=454,098)	(n=28,869)	(n=58,221)	(n=16,438)
Barra fastinatata						
Race/ethnicity						
Race/ethnicity African American	5.3 %	6.8 %	7.9 %	3.1 % **	4.2 % **	5.1 % **
•	5.3 % 2.7	6.8 % 5.2	7.9 % 6.6	3.1 % ** 2.8	4.2 % ** 4.6 **	5.1 % ** 5.9 **
African American						
African American Asian-Pacific American	2.7	5.2	6.6	2.8	4.6 **	5.9 **
African American Asian-Pacific American Subcontinent Asian American	2.7 0.6	5.2 1.7	6.6 2.6	2.8 1.1 **	4.6 ** 1.3 **	5.9 ** 1.9 **
African American Asian-Pacific American Subcontinent Asian American Hispanic American	2.7 0.6 2.5	5.2 1.7 4.4	6.6 2.6 6.6	2.8 1.1 ** 3.5 **	4.6 ** 1.3 ** 5.5 **	5.9 ** 1.9 ** 7.3 **
African American Asian-Pacific American Subcontinent Asian American Hispanic American Native American	2.7 0.6 2.5 0.3	5.2 1.7 4.4 0.7	6.6 2.6 6.6 0.7	2.8 1.1 ** 3.5 ** 0.3 **	4.6 ** 1.3 ** 5.5 ** 0.7	5.9 ** 1.9 ** 7.3 ** 0.9 **
African American Asian-Pacific American Subcontinent Asian American Hispanic American Native American Other minority group	2.7 0.6 2.5 0.3	5.2 1.7 4.4 0.7 0.4	6.6 2.6 6.6 0.7 0.3	2.8 1.1 ** 3.5 ** 0.3 **	4.6 ** 1.3 ** 5.5 ** 0.7 0.4	5.9 ** 1.9 ** 7.3 ** 0.9 **
African American Asian-Pacific American Subcontinent Asian American Hispanic American Native American Other minority group Total minority	2.7 0.6 2.5 0.3 0.1 11.4 %	5.2 1.7 4.4 0.7 0.4 19.1 %	6.6 2.6 6.6 0.7 0.3 24.7 %	2.8 1.1 ** 3.5 ** 0.3 ** 0.1 10.9 %	4.6 ** 1.3 ** 5.5 ** 0.7 0.4 16.7 %	5.9 ** 1.9 ** 7.3 ** 0.9 ** 0.2 21.3 %
African American Asian-Pacific American Subcontinent Asian American Hispanic American Native American Other minority group Total minority Non-Hispanic white Total	2.7 0.6 2.5 0.3 0.1 11.4 %	5.2 1.7 4.4 0.7 0.4 19.1 %	6.6 2.6 6.6 0.7 0.3 24.7 %	2.8 1.1 ** 3.5 ** 0.3 ** 0.1 10.9 %	4.6 ** 1.3 ** 5.5 ** 0.7 0.4 16.7 % 83.3 **	5.9 ** 1.9 ** 7.3 ** 0.9 ** 0.2 21.3 % 78.7 **
African American Asian-Pacific American Subcontinent Asian American Hispanic American Native American Other minority group Total minority Non-Hispanic white	2.7 0.6 2.5 0.3 0.1 11.4 %	5.2 1.7 4.4 0.7 0.4 19.1 %	6.6 2.6 6.6 0.7 0.3 24.7 %	2.8 1.1 ** 3.5 ** 0.3 ** 0.1 10.9 %	4.6 ** 1.3 ** 5.5 ** 0.7 0.4 16.7 % 83.3 **	5.9 ** 1.9 ** 7.3 ** 0.9 ** 0.2 21.3 % 78.7 **
African American Asian-Pacific American Subcontinent Asian American Hispanic American Native American Other minority group Total minority Non-Hispanic white Total	2.7 0.6 2.5 0.3 0.1 11.4 % 88.6 100.0 %	5.2 1.7 4.4 0.7 0.4 19.1 % 80.9 100.0 %	6.6 2.6 6.6 0.7 0.3 24.7 % 75.3	2.8 1.1 ** 3.5 ** 0.3 ** 0.1 10.9 % 88.9 99.8 %	4.6 ** 1.3 ** 5.5 ** 0.7 0.4 16.7 % 83.3 **	5.9 ** 1.9 ** 7.3 ** 0.9 ** 0.2 21.3 % 78.7 ** 100.0 %

Note:

Source: BBC Research & Consulting from 1980 and 2000 U.S. Census 5% sample and 2008-2010 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/.

Gender. Compared to their representation among workers 25 and older with a college degree in all industries, relatively few women work in the engineering industry. In 2008 through 2010, women represented 30 percent of engineering-related workers in Washington but about 46 percent of workers with a four-year college degree.

^{**} Denotes that the difference in proportions between engineers and workers in all industry groups for the given Census/ACS year is statistically significant at the 95% confidence level.

The engineering –related industry in 2000 and 2008-2010 is "architectural, engineering, and related services," and in 1980 is "engineering, architectural and surveying services." Though closely related, the groups are not exactly comparable.

Civil engineers. The study team also examined the number of minorities and women among civil engineers in Washington in 1980, 2000, and 2008 through 2010. Figure E-11 presents those results. Overall, in 2008 through 2010, the percentage of civil engineers who were minorities (21%) was largely consistent with the percentage of all Washington workers with college degrees who were minorities (20%). That result is similar to the United States as a whole where the percentage of civil engineers who were minorities (23%) was similar to the percentage of all workers with college degrees who were minorities (25%). Only 15 percent of civil engineers in Washington were women in 2008 through 2010, far less than the percentage of all workers with college degrees that were women (46%).

Figure E-11.

Demographics of civil engineers and workers 25 and older with a college degree, 1980, 2000 and 2008-2010

	Wor	kers 25+ with colleg	e degree	Civ	il engineering workf	orce
- Washington	1980 (n=18,139)	2000 (n=38,976)	2008-10 (n=32,275)	1980 (n=267)	2000 (n=437)	2008-10 (n=348)
Race/ethnicity						
African American	1.5 %	2.4 %	2.6 %	0.7 %	2.3 %	2.8 %
Asian-Pacific American	3.6	7.1	9.9	4.5	9.4	7.8
Subcontinent Asian American	0.2	1.0	2.3	0.7	0.8	2.6
Hispanic American	1.2	2.2	3.5	0.7	3.2	5.7
Native American	0.5	1.2	1.3	1.1	1.2	1.5
Other minority group Total minority	7.1 %	0.4 14.4 %	0.2 19.8 %	<u>0.0</u> 7.9 %	0.4 17.4 %	0.2 20.6 %
Non-Hispanic white Total	92.9 100.0 %	85.6 100.0 %	80.2 100.0 %	92.1	82.6 100.0 %	79.4 100.0 %
Gender Female Male Total	33.0 % 67.0 100.0 %	44.5 % 55.5 100.0 %	46.4 % 53.6 100.0 %	4.5 % ** 95.5 100.0 %	14.4 % ** 85.6 ** 100.0 %	14.9 % ** 85.1 ** 100.0 %
	Worke	ers 25+ with college	degree	Civil e	ngineering workford	ce
- United States	Worke 1980 (n=858,511)	2000 (n=1,631,919)	degree 2008-10 (n=454,098)	Civil e 1980 (n=10,088)	ngineering workford 2000 (n=12,912)	2008-10 (n=3,355)
United States Race/ethnicity	1980	2000	2008-10	1980	2000	2008-10
	1980	2000	2008-10	1980	2000	2008-10
Race/ethnicity	1980 (n=858,511)	2000 (n=1,631,919)	2008-10 (n=454,098)	1980 (n=10,088)	2000 (n=12,912)	2008-10 (n=3,355)
Race/ethnicity African American	1980 (n=858,511) 5.3 %	2000 (n=1,631,919) 6.8 %	2008-10 (n=454,098) 7.9 %	1980 (n=10,088) 2.5 % **	2000 (n=12,912) 3.7 % **	2008-10 (n=3,355) 4.6 % **
Race/ethnicity African American Asian-Pacific American	1980 (n=858,511) 5.3 % 2.7	2000 (n=1,631,919) 6.8 % 5.2	2008-10 (n=454,098) 7.9 % 6.6	1980 (n=10,088) 2.5 % ** 4.0 **	2000 (n=12,912) 3.7 % ** 6.2 **	2008-10 (n=3,355) 4.6 % ** 7.6 **
Race/ethnicity African American Asian-Pacific American Subcontinent Asian American	1980 (n=858,511) 5.3 % 2.7 0.6	2000 (n=1,631,919) 6.8 % 5.2 1.7	2008-10 (n=454,098) 7.9 % 6.6 2.6	1980 (n=10,088) 2.5 % ** 4.0 ** 2.0 **	2000 (n=12,912) 3.7 % ** 6.2 ** 2.6 **	2008-10 (n=3,355) 4.6 % ** 7.6 ** 3.7 **
Race/ethnicity African American Asian-Pacific American Subcontinent Asian American Hispanic American	1980 (n=858,511) 5.3 % 2.7 0.6 2.5	2000 (n=1,631,919) 6.8 % 5.2 1.7 4.4	2008-10 (n=454,098) 7.9 % 6.6 2.6 6.6	1980 (n=10,088) 2.5 % ** 4.0 ** 2.0 ** 2.9 **	2000 (n=12,912) 3.7 % ** 6.2 ** 2.6 ** 4.4	2008-10 (n=3,355) 4.6 % ** 7.6 ** 3.7 ** 5.4 **
Race/ethnicity African American Asian-Pacific American Subcontinent Asian American Hispanic American Native American	1980 (n=858,511) 5.3 % 2.7 0.6 2.5 0.3	2000 (n=1,631,919) 6.8 % 5.2 1.7 4.4 0.7	2008-10 (n=454,098) 7.9 % 6.6 2.6 6.6 0.7	1980 (n=10,088) 2.5 % ** 4.0 ** 2.0 ** 2.9 ** 0.3	2000 (n=12,912) 3.7 % ** 6.2 ** 2.6 ** 4.4 0.8	2008-10 (n=3,355) 4.6 % ** 7.6 ** 3.7 ** 5.4 **
Race/ethnicity African American Asian-Pacific American Subcontinent Asian American Hispanic American Native American Other minority group	1980 (n=858,511) 5.3 % 2.7 0.6 2.5 0.3	2000 (n=1,631,919) 6.8 % 5.2 1.7 4.4 0.7 0.4	2008-10 (n=454,098) 7.9 % 6.6 2.6 6.6 0.7	1980 (n=10,088) 2.5 % ** 4.0 ** 2.0 ** 2.9 ** 0.3 0.2 **	2000 (n=12,912) 3.7 % ** 6.2 ** 2.6 ** 4.4 0.8 0.4	2008-10 (n=3,355) 4.6 % ** 7.6 ** 3.7 ** 5.4 ** 0.7 0.8 **
Race/ethnicity African American Asian-Pacific American Subcontinent Asian American Hispanic American Native American Other minority group Total minority	1980 (n=858,511) 5.3 % 2.7 0.6 2.5 0.3 0.1 11.4 %	2000 (n=1,631,919) 6.8 % 5.2 1.7 4.4 0.7 0.4 19.1 %	2008-10 (n=454,098) 7.9 % 6.6 2.6 6.6 0.7 0.3 24.7 %	1980 (n=10,088) 2.5 % ** 4.0 ** 2.0 ** 2.9 ** 0.3 0.2 **	2000 (n=12,912) 3.7 % ** 6.2 ** 2.6 ** 4.4 0.8 0.4 18.2 %	2008-10 (n=3,355) 4.6 % ** 7.6 ** 3.7 ** 5.4 ** 0.7 0.8 ** 22.8 %
Race/ethnicity African American Asian-Pacific American Subcontinent Asian American Hispanic American Native American Other minority group Total minority Non-Hispanic white	1980 (n=858,511) 5.3 % 2.7 0.6 2.5 0.3 0.1 11.4 % 88.6	2000 (n=1,631,919) 6.8 % 5.2 1.7 4.4 0.7 0.4 19.1 %	2008-10 (n=454,098) 7.9 % 6.6 2.6 6.6 0.7 0.3 24.7 %	1980 (n=10,088) 2.5 % ** 4.0 ** 2.0 ** 2.9 ** 0.3 0.2 ** 11.8 % 88.2	2000 (n=12,912) 3.7 % ** 6.2 ** 2.6 ** 4.4 0.8 0.4 18.2 % 81.8	2008-10 (n=3,355) 4.6 % ** 7.6 ** 3.7 ** 5.4 ** 0.7 0.8 ** 22.8 %
Race/ethnicity African American Asian-Pacific American Subcontinent Asian American Hispanic American Native American Other minority group Total minority Non-Hispanic white Total	1980 (n=858,511) 5.3 % 2.7 0.6 2.5 0.3 0.1 11.4 % 88.6	2000 (n=1,631,919) 6.8 % 5.2 1.7 4.4 0.7 0.4 19.1 %	2008-10 (n=454,098) 7.9 % 6.6 2.6 6.6 0.7 0.3 24.7 %	1980 (n=10,088) 2.5 % ** 4.0 ** 2.0 ** 2.9 ** 0.3 0.2 ** 11.8 % 88.2	2000 (n=12,912) 3.7 % ** 6.2 ** 2.6 ** 4.4 0.8 0.4 18.2 % 81.8	2008-10 (n=3,355) 4.6 % ** 7.6 ** 3.7 ** 5.4 ** 0.7 0.8 ** 22.8 % 77.2 **
Race/ethnicity African American Asian-Pacific American Subcontinent Asian American Hispanic American Native American Other minority group Total minority Non-Hispanic white Total Gender	1980 (n=858,511) 5.3 % 2.7 0.6 2.5 0.3 0.1 11.4 % 88.6 100.0 %	2000 (n=1,631,919) 6.8 % 5.2 1.7 4.4 0.7 0.4 19.1 % 80.9 100.0 %	2008-10 (n=454,098) 7.9 % 6.6 2.6 6.6 0.7 0.3 24.7 % 75.3 100.0 %	1980 (n=10,088) 2.5 % ** 4.0 ** 2.0 ** 2.9 ** 0.3 0.2 ** 11.8 % 88.2 100.0 %	2000 (n=12,912) 3.7 % ** 6.2 ** 2.6 ** 4.4 0.8 0.4 18.2 % 81.8 100.0 %	2008-10 (n=3,355) 4.6 % ** 7.6 ** 3.7 ** 5.4 ** 0.7 0.8 ** 22.8 % 77.2 ** 100.0 %

Note: ** Denotes that the difference in proportions between civil engineers and workers 25+ with a college degree for the given Census/ACS year is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from the 1980 and 2000 U.S. Census 5% sample s and 2008-2010 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/.

Summary

BBC's analyses suggest that there are barriers to entry for certain minority groups and for women in the construction and engineering industries in Washington.

- Fewer African Americans, Asian-Pacific Americans, and Subcontinent Asian Americans worked in the Washington construction and engineering industries than what might be expected based on their representation in the overall workforce (2008 through 2010). For engineering, barriers may begin with education for certain minority groups.
- Women accounted for particularly few workers in the Washington construction and engineering industries.
- Lack of education appears to be a barrier to entry into the Washington engineering industry for African Americans, Hispanic Americans, and Native Americans. Workers in each of those groups were less likely to have a four-year college degree compared to non-Hispanic whites.

Barriers to advancement in the construction industry may also be an important reason for the relatively low number of minority and female business owners.

- Representation of minorities and women was much lower in certain construction trades (including first-line supervisors) compared with other trades.
- Compared to non-Hispanic whites, African Americans and Hispanic Americans were less likely to be managers in the construction industry.

APPENDIX F. Business Ownership in the Washington Construction and Engineering Industries

About one-fifth of all workers in the Washington construction industry were self-employed business owners in 2008 through 2010. Thirteen percent of workers in the local engineering industry were self-employed business owners. Focusing on those two industries, BBC examined business ownership for different racial/ethnic and gender groups in Washington. BBC used Public Use Microdata Samples (PUMS) from the 1990 and 2000 Census and from the 2008 through 2010 American Community Survey (ACS) to study business ownership rates in the construction and engineering industries. Note that "self-employment" and "business ownership" are used interchangeably in Appendix F.

Business Ownership Rates

Many studies have explored differences between minority and non-minority business ownership at the national level. Although overall self-employment rates have increased for minorities and women over time, a number of studies indicate that race/ethnicity and gender continue to affect opportunities for business ownership.¹ The extent to which such individual characteristics may limit business ownership opportunities differs across industries and from state to state.

Construction industry. Compared to other industries, construction has a large number of business owners. In 2008 through 2010, 21 percent of workers in the Washington construction industry were self-employed (in incorporated or unincorporated businesses) compared with only 10 percent of workers across all industries. However, rates of self-employment in the Washington construction industry vary by race/ethnicity and gender. Figure F-1 shows the percentage of workers who were self-employed in the construction industry by group for 1990, 2000, and 2008 through 2010. Figure F-1 also shows corresponding sample sizes for those percentages. Due to small sample sizes, Subcontinent Asian Americans are included in the "other race minority" category. Figure 1 presents results for Washington and for the United States as a whole.

¹ 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. 2007. *Why are Black-Owned Businesses Less Successful than White-Owned Businesses? The Role of Families, Inheritances and Business Human Capital*. Journal of Labor Economics, 25(2), 289-323.; 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.

Figure F-1.
Percentage of workers in the construction industry who were self-employed, 1990, 2000, and 2008-2010

								Sample size	
Washington	1990		2000		2008-20	10	1990	2000	2008-2010
Race/ethnicity									
African American	5.8	% **	7.8	% **	20.0	%	97	157	117
Asian-Pacific American	17.3		21.4		21.6		88	188	185
Hispanic American	7.0	**	9.1	**	8.7	**	163	566	642
Native American	8.8	**	12.9	**	11.2	**	179	366	191
Other race minority	0.0		11.9		35.7		9	66	28
Non-Hispanic white	18.9		22.6		22.9		7,260	9,261	6,068
Gender									
Female	16.6	%	16.1	% **	16.3	% **	883	1,228	890
Male	18.4		22.0		21.5		6,913	9,376	6,341
All individuals	18.2	%	21.3	%	20.9	%	7,796	10,604	7,231
								Sample size	2
United States	1990		2000		2008-20	10	1990	2000	2008-2010
Race/ethnicity									
African American	10.5	% **	15.2	% **	18.9	% **	25,166	26,752	4,927
•	10.5 14.5	% ** **		% ** **	18.9 25.7	% **	25,166 3,889	26,752 5,297	,
African American			21.3			% ** **	•	•	1,506
African American Asian-Pacific American	14.5	**	21.3 12.2	**	25.7		3,889	5,297	1,506 18,679
African American Asian-Pacific American Hispanic American	14.5 11.1	**	21.3 12.2 19.2	**	25.7 16.6	**	3,889 36,411	5,297 66,531	1,506 18,679 1,617
African American Asian-Pacific American Hispanic American Native American	14.5 11.1 12.6	**	21.3 12.2 19.2	**	25.7 16.6 20.3	**	3,889 36,411 4,397	5,297 66,531 8,089	1,506 18,679 1,617 396
African American Asian-Pacific American Hispanic American Native American Other race minority	14.5 11.1 12.6 11.3	**	21.3 12.2 19.2 22.2	**	25.7 16.6 20.3 23.0	**	3,889 36,411 4,397 844	5,297 66,531 8,089 2,648	1,506 18,679 1,617 396
African American Asian-Pacific American Hispanic American Native American Other race minority Non-Hispanic white	14.5 11.1 12.6 11.3 21.0	**	21.3 12.2 19.2 22.2 25.4	**	25.7 16.6 20.3 23.0 27.4	**	3,889 36,411 4,397 844	5,297 66,531 8,089 2,648	1,506 18,679 1,617 396 75,941
African American Asian-Pacific American Hispanic American Native American Other race minority Non-Hispanic white Gender	14.5 11.1 12.6 11.3 21.0	**	21.3 12.2 19.2 22.2 25.4	** ** **	25.7 16.6 20.3 23.0 27.4	**	3,889 36,411 4,397 844 339,345	5,297 66,531 8,089 2,648 371,152	4,927 1,506 18,679 1,617 396 75,941 10,241 92,825

Note: Other race minority includes Subcontinent Asian Americans.

Source: BBC Research & Consulting from 1990 and 2000 U.S. Census 5% sample and 2008-2010 ACS Public Use Microdata samples. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

Business ownership rates in 2000. The 2000 Census provides information on the largest sample of construction workers of any of the data sets examined. In 2000, 23 percent of non-Hispanic whites working in the Washington construction industry were self-employed. Business ownership rates were lower for all minority groups that the study team examined (but the differences were not statistically significant for Asian-Pacific Americans or for other race minorities).

 African Americans in the Washington construction industry owned businesses at a rate of about 8 percent, approximately one-third of the rate for non-Hispanic whites and substantially lower than the national business ownership rate for African Americans.

^{*, **} 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 90% or 95% confidence level, respectively.

- About 9 percent of Hispanic Americans in the construction industry owned businesses, less than half of the rate for non-Hispanic whites.
- The ownership rate of Native Americans in the construction industry was 13 percent, substantially lower than that for non-Hispanic whites.

Compared with about 22 percent of men, 16 percent of women working in the construction industry in Washington owned businesses in 2000. That difference was consistent with gender trends observed for the entire nation.

National trends also indicated disparities between minority and non-Hispanic white ownership rates in the construction industry but the disparities for African Americans, Hispanic Americans, and Native Americans were much greater in Washington. In addition, women were less likely to own businesses than men in the construction industry at the national level.

Changes in business ownership rates since 2000. Business ownership rates in the Washington construction industry increased substantially among African Americans and among other race minorities between 2000 and 2008 through 2010. However, ownership rates decreased somewhat for both Hispanic Americans and Native Americans.

- In 2008 through 2010, a substantially smaller percentage of Hispanic Americans (9%) than non-Hispanic whites (23%) were business owners in the Washington construction industry.
- About 11 percent of Native Americans in the construction industry owned their businesses, less than half of the rate for non-Hispanic whites.
- The business ownership rate for African Americans rose to 20 percent, almost equal to the rate for non-Hispanic whites.
- Asian-Pacific Americans continued to own businesses at a similar rate as non-Hispanic whites in 2008 through 2010.

Substantial differences in business ownership rates persisted between women (16%) and men (21%) in 2008 through 2010, consistent with national trends.

Engineering industry. BBC also examined business ownership rates in the engineering industry. Figure F-2 presents the percentage (and corresponding sample sizes) of workers who were self-employed in the engineering industry in 1990, 2000, and 2008 through 2010. Similar to analyses of the construction industry, Subcontinent Asian Americans are included in the "other race minority" category. It should be noted that sample sizes for African Americans and Native Americans in the engineering industry are relatively low, and as a result, the ownership rates for those groups were not significantly different from non-Hispanic whites for any of the years that the study team analyzed.

Business ownership rates in 2000. In 2000, about 14 percent of non-Hispanic whites working in the Washington engineering industry were self-employed. All minority groups had lower rates of business ownership than non-Hispanic whites.

Figure F-2.
Percentage of workers in the engineering industry who were self-employed, 1990, 2000, and 2008-2010

								Sample size	
1990		2000		2008-20	10		1990	2000	2008-2010
0.0	%	0.0	%	0.0	%		6	20	20
9.8		5.9	*	9.4			33	117	109
27.9		8.2		6.2			24	44	38
27.0		3.2		17.5			5	22	20
0.0		12.8		8.6			4	22	18
13.8		13.8		13.5			728	1,520	1,155
6.6	% **	7.0	% **	8.7	%	**	208	497	412
16.5		15.1		14.4			592	1,248	948
13.9	%	12.8	%	12.7	%		800	1,745	1,360
								Sample size	
1990		2000		2008-20	10		1990	2000	2008-2010
5.8	% **	5.2	% **	5.3	%	**	927	2,206	673
5.8 10.0	% ** **	5.2 8.5	% ** **	5.3 8.3		**	927 1,249	2,206 2,620	673 876
								•	876
10.0	**	8.5	**	8.3		**	1,249	2,620	876 1,034
10.0 12.0	**	8.5 8.9	**	8.3 8.8		**	1,249 1,406	2,620 3,123	
10.0 12.0 12.9	**	8.5 8.9 11.8	**	8.3 8.8 7.7		**	1,249 1,406 137	2,620 3,123 474	876 1,034 115
10.0 12.0 12.9 12.9	**	8.5 8.9 11.8 7.5	**	8.3 8.8 7.7 6.0		**	1,249 1,406 137 376	2,620 3,123 474 978	876 1,034 115 262
10.0 12.0 12.9 12.9 15.8	**	8.5 8.9 11.8 7.5 14.2	**	8.3 8.8 7.7 6.0		** ** **	1,249 1,406 137 376	2,620 3,123 474 978	876 1,034 115 262 13,510
10.0 12.0 12.9 12.9 15.8	**	8.5 8.9 11.8 7.5 14.2	**	8.3 8.8 7.7 6.0 13.2		** ** **	1,249 1,406 137 376 28,944	2,620 3,123 474 978 48,823	876 1,034 115 262
	0.0 9.8 27.9 27.0 0.0 13.8 6.6 16.5	0.0 % 9.8 27.9 27.0 0.0 13.8 6.6 % ** 16.5 13.9 %	0.0 % 0.0 9.8 5.9 27.9 8.2 27.0 3.2 0.0 12.8 13.8 13.8 6.6 % ** 7.0 16.5 15.1 13.9 % 12.8	0.0 % 0.0 % 9.8 5.9 * 27.9 8.2 27.0 3.2 0.0 12.8 13.8 13.8 6.6 % ** 7.0 % ** 16.5 15.1 13.9 % 12.8 %	0.0 % 0.0 % 0.0 9.8 5.9 * 9.4 27.9 8.2 6.2 27.0 3.2 17.5 0.0 12.8 8.6 13.8 13.8 13.5 6.6 % ** 7.0 % ** 8.7 16.5 15.1 14.4 13.9 % 12.8 % 12.7	0.0 % 0.0 % 0.0 % 9.8 5.9 * 9.4 27.9 8.2 6.2 27.0 3.2 17.5 0.0 12.8 8.6 13.8 13.8 13.5 6.6 % ** 7.0 % ** 8.7 % 16.5 15.1 14.4 13.9 % 12.8 % 12.7 %	0.0 % 0.0 % 0.0 % 9.8 5.9 * 9.4 27.9 8.2 6.2 27.0 3.2 17.5 0.0 12.8 8.6 13.8 13.8 13.5 6.6 % ** 7.0 % ** 8.7 % ** 16.5 15.1 14.4 13.9 % 12.8 % 12.7 %	0.0 % 0.0 % 0.0 % 6 9.8 5.9 * 9.4 33 27.9 8.2 6.2 24 27.0 3.2 17.5 5 0.0 12.8 8.6 4 4 13.8 13.8 13.5 728 6.6 % ** 7.0 % ** 8.7 % ** 208 16.5 15.1 14.4 592 13.9 % 12.8 % 12.7 % 800	1990 2000 2008-2010 1990 2000 0.0 % 0.0 % 6 20 9.8 5.9 * 9.4 33 117 27.9 8.2 6.2 24 44 27.0 3.2 17.5 5 22 0.0 12.8 8.6 4 22 13.8 13.8 13.5 728 1,520 6.6 % ** 7.0 % ** 8.7 % ** 208 497 16.5 15.1 14.4 592 1,248 13.9 % 12.8 % 12.7 % 800 1,745 Sample size

Note: Other race minority includes Subcontinent Asian Americans.

Source: BBC Research & Consulting from 1990 and 2000 U.S. Census 5% sample and 2008-2010 ACS Public Use Microdata samples. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

- About 6 percent of Asian-Pacific Americans working in the engineering industry were selfemployed, less than half the rate for non-Hispanic whites.
- Hispanic Americans showed a business ownership rate of 8 percent, lower than the rate for non-Hispanic whites but not a statistically significant difference.
- The ownership rate of Native Americans was only 3 percent, approximately one quarter of the rate for non-Hispanic whites but not a statistically significant difference, perhaps due to a relatively small sample size.
- Of the 20 African American engineering industry workers in the dataset, none were business owners.

^{*, **} 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 90% or 95% confidence level, respectively.

Approximately 7 percent of women working in the Washington engineering industry in 2000 were business owners compared with 15 percent of men in the Washington engineering industry.

Changes in business ownership rates since 2000. As shown in Figure F-2, the rate of business ownership in the Washington engineering industry for non-Hispanic whites remained at about 14 percent in 2008 through 2010. Although differences between ownership rates for non-Hispanic whites and most minorities were apparent, those differences were not statistically significant.

- The business ownership rate for Hispanic Americans fell to 6 percent, lower than the rate for non-Hispanic whites.
- The business ownership rate for Asian-Pacific Americans increased to 9 percent but was still below the rate for non-Hispanic whites.
- As was the case in 2000, there were no African American engineering workers who owned engineering businesses in the dataset.
- The business ownership rate for Native Americans increased substantially between 2000 and 2008 through 2010 and remained higher than the rate for non-Hispanic whites. However, that difference was not statistically significant.

The rate of business ownership for women working in the Washington engineering industry increased between 2000 and 2008 through 2010 whereas the rates for men decreased, but women (9%) still owned engineering businesses at a lower rate than men (14%).

Potential causes of differences in business ownership rates. Researchers have examined whether there are disparities in business ownership rates after considering business owners' race- and gender-neutral personal characteristics such as education and age. Several studies have found that disparities in business ownership still exist even after accounting for such race- and gender-neutral factors.

■ Some studies have concluded 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.² In addition, one study found that housing appreciation measured at the Metropolitan Statistical Area level is a positive determinant of becoming self-employed.³ However, unexplained differences still exist when statistically controlling for those factors.⁴

² 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.

³ Fairlie, Robert W. and Harry A. Krashinksy. 2006. Liquidity Constraints, Household Wealth and Entrepreneurship Revisited.

⁴ 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).

- Education has a positive effect 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 non-minorities with similar levels of education.⁵
- 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 minorities.⁶
- Time since immigration and assimilation into American society are also important determinants of self-employment, but unexplained differences in business ownership between minorities and non-minorities still exist when accounting for those factors.⁷
- In 1999, Initiative 200 amended state law to prohibit the use of race- and gender-based preferences in public contracting, public employment, and public education, unless such requirements are required "to establish or maintain eligibility for any federal program, if ineligibility would result in a loss of federal funds to the state." Thus, Initiative 200 prohibited government agencies in Washington from applying race- and gender-conscious programs (e.g., contract-specific goals) to state-funded contracts. However, Initiative 200 permits continued implementation of federally-required programs, such as the Federal Disadvantaged Business Enterprise (DBE) Program. Some academic research has suggested adverse outcomes for minorities, women, and minority- and women-owned businesses as a result of Initiative 200.9

Business Ownership Regression Analysis

Race/ethnicity and gender can affect opportunities for business ownership, even when accounting for individuals' race- and gender-neutral personal characteristics such as education, age, and familial status. To further examine business ownership, BBC developed multivariate regression models to explore patterns of business ownership in Washington. Those models estimate the effect of race/ethnicity and gender on the probability of business ownership while statistically controlling for other factors.

An extensive body of literature examines whether race- and gender-neutral personal factors such as access to financial capital, education, age, and family characteristics (e.g., marital status)

⁵ 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.

⁶ 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. 2007. Why are Black-Owned Businesses Less Successful than White-Owned Businesses? The Role of Families, Inheritances and Business Human Capital. Journal of Labor Economics, 25(2), 289-323.

⁷ 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.

⁸ RCW 49.60.400(1)

⁹ Fairlie, R. & Marion, J. 2007. "Affirmative Action Programs and Business Ownership among Minorities and Women." Ford Foundation and National Economic Development and Law Center.

help explain differences in business ownership. That subject has also been examined in other disparity studies. For example, prior studies in Minnesota and Illinois have used econometric analyses to investigate whether disparities in business ownership for minorities and women working in the construction and engineering industries persist after statistically controlling for race- and gender-neutral personal characteristics. ^{10, 11} Those studies have incorporated probit econometric models using PUMS data from the 2000 Census and have been among the materials that agencies have submitted to courts in subsequent litigation concerning the implementation of the Federal DBE Program.

BBC used similar probit regression models to predict business ownership from multiple independent or "explanatory" variables. 12 Independent variables included:

- Personal characteristics that are potentially linked to the likelihood of business ownership
 — age, age-squared, disability, marital status, number of children in the household, number
 of elderly people in the household, and English-speaking ability;
- 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 races/ethnicities and genders of the individuals included in the analysis.¹³

BBC developed four models using PUMS data from the 2000 Census and 2008-2010 ACS:

- A probit regression model for the Washington construction industry in 2000 that included 9,173 observations;
- A probit regression model for the Washington construction industry in 2008 through 2010 that included 6,869 observations;
- A probit regression model for the Washington engineering industry in 2000 that included 1,575 observations; and
- A probit regression model for the Washington engineering industry in 2008 through 2010 that included 1,289 observations.

 $^{^{10}}$ National Economic Research Associates, Inc. 2000. Disadvantaged Business Enterprise Availability Study. Prepared for the Minnesota Department of Transportation.

 $^{^{11}}$ National Economic Research Associates, Inc. 2004. *Disadvantaged Business Enterprise Availability Study*. Prepared for the Illinois Department of Transportation.

¹² 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 and "0" for individuals who are not self-employed. The model enables estimation of the probability that workers in a given sample are self-employed, based on their individual characteristics. The study team excluded observations where the Census Bureau had imputed values for the dependent variable (business ownership).

 $^{^{13}}$ BBC also considered an interaction variable to represent the combined effect of being a minority and female but the term was not significant in any models and was excluded from the final regression models.

Construction industry. BBC developed probit regression models of business ownership in the Washington construction industry for 2000 and 2008 through 2010.

Washington construction industry in 2000. Figure F-3 presents the coefficients for the probit model for individuals working in the Washington construction industry in 2000. The model indicates that several race- and gender-neutral factors were important and statistically significant in predicting the probability of business ownership for workers in the Washington construction industry:

Figure F-3. Washington construction industry business ownership model, 2000

Note:

Other race minority includes Subcontinent Asian Americans

*,** Denote statistical significance at the 90% and 95% confidence levels, respectively.

Source:

BBC Research & Consulting from 2000 Census data. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

Variable	Coefficient
Constant	-2.8734 **
Age	0.0568 **
Age-squared	-0.0004 **
Married	0.0164
Disabled	0.0017
Number of children in household	0.0760 **
Number of people over 65 in household	0.0407
Owns home	0.0402
Home value (\$000s)	0.0000 **
Monthly mortgage payment (\$000s)	0.0000
Interest and dividend income (\$000s)	0.0000 **
Income of spouse or partner (\$000s)	0.0000 **
Speaks English well	0.1828
Less than high school education	0.0572
Some college	-0.0228
Four-year degree	-0.0673
Advanced degree	0.0420
Hispanic American	-0.3075 **
African American	-0.4807 **
Native American	-0.2572 **
Asian-Pacific American	-0.0062
Other race minority	-0.2659
Female	-0.3071 **

- Being older was associated with a higher probability of business ownership but the effect was smaller for the oldest individuals;
- Having more children was associated with a greater likelihood of owning a business;
- Higher home values were associated with a higher probability of business ownership; and
- Greater interest and dividend income as well as income from a spouse or partner were associated with a greater likelihood of owning a business.

After statistically controlling for race- and gender-neutral factors, statistically significant disparities in business ownership rates remained for Hispanic Americans, African Americans, Native Americans, and women working in the Washington construction industry.

Simulations of business ownership rates. Probit modeling allowed for simulations of business ownership rates for minorities and women as if they had the same probability of business ownership as similarly situated non-Hispanic whites and males, respectively. To conduct those simulations, BBC took the following steps:

- 1. BBC performed a probit regression analysis predicting business ownership using only non-Hispanic white (or non-Hispanic white male) construction workers in the dataset.¹⁴
- 2. The study team then used the coefficients from that model and the mean personal, financial, and educational characteristics of individual minority groups (or women) working in the Washington construction industry (i.e., indicators of educational attainment as well as indicators of personal financial resources and constraints) to estimate the probability of business ownership of such a group.

The results of those simulations yielded estimates of business ownership rates for non-Hispanic whites (or non-Hispanic white males) who shared the same characteristics of minorities (or women) working in the Washington construction industry. Higher simulated rates indicate that, in reality, race/ethnicity or gender makes it less likely for minorities and women to own businesses than similarly-situated non-Hispanic whites (or non-Hispanic white males). BBC performed those calculations for only those groups for which race/ethnicity or gender was a statistically significant negative factor in business ownership (i.e., African Americans, Hispanic Americans, Native Americans, and women, as shown in Figure F-3).

Figure F-4 presents simulated business ownership rates (i.e., "benchmark" rates) for African Americans, Hispanic Americans, Native Americans, and non-Hispanic white women, and compares them to the actual, observed mean probabilities of business ownership for those groups. The disparity index was calculated by taking the actual business ownership rate for each group and dividing it by each group's benchmark rate, and then multiplying the result by 100. Values less than 100 indicate that, in reality, the group is less likely to own businesses than what would be expected for similarly-situated non-Hispanic whites (or non-Hispanic white males) — in other words that race/ethnicity (or gender) affects the likelihood of those groups owning businesses in the Washington construction industry. Similar simulation approaches have been incorporated in other disparity studies that courts have reviewed.

Comparisons of the actual, observed business ownership rate of African Americans in the Washington construction industry with the benchmark based on simulated business ownership rates of similarly-situated non-Hispanic white construction workers showed that African Americans (disparity index of 48) own businesses at less than half the rate that would be expected of non-Hispanic white construction workers who share the same personal, financial, and educational characteristics. Hispanic Americans (disparity index of 60) also owned businesses at rates substantially lower than what would be expected based on the simulated business ownership rates of similarly-situated non-Hispanic white construction workers. Native Americans in the Washington construction industry own businesses at approximately 70 percent of the rate of similarly situated non-Hispanic Whites.

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 $^{^{14}}$ That version of the model excluded the race/ethnicity and gender indicator variables, because the value of all of those variables would be the same (i.e., 0).

Figure F-4.
Comparison of actual business ownership rates to simulated rates for Washington construction workers, 2000

	Self-emple	Self-employment rate				
Group	Actual	Benchmark	(100 = parity)			
African American	8.7%	18.1%	48			
Hispanic American	8.8%	14.7%	60			
Native American	13.7%	19.5%	70			
Non-Hispanic white female	17.3%	26.0%	66			

Note: As the benchmark figure can only be estimated for records with an observed (rather than imputed) 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 F-1.

Source: BBC Research & Consulting from statistical models of 2000 Census data. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

Non-Hispanic white women (disparity index of 66) own businesses at about two-thirds of the rate that would be expected based on the simulated business ownership rates of similarly-situated non-Hispanic white male construction workers.

Washington construction industry in 2008 through 2010. Figure F-5 presents the coefficients from the probit model predicting business ownership in the Washington construction industry in 2008 through 2010.

Figure F-5. Washington construction industry business ownership model, 2008-2010

Note:

Other race minority includes Subcontinent Asian Americans.

*,** Denote statistical significance at the 90% and 95% confidence levels, respectively.

Source:

BBC Research & Consulting from 2008-2010 ACS data. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

Variable	Coefficient
Constant	-2.3996 **
Age	0.0517 **
Age-squared	-0.0003 *
Married	0.1075
Disabled	-0.0600
Number of children in household	0.0167
Number of people over 65 in household	0.0603
Owns home	-0.0586
Home value (\$000s)	0.0000 **
Monthly mortgage payment (\$000s)	0.0001 *
Interest and dividend income (\$000s)	0.0000 **
Income of spouse or partner (\$000s)	0.0000
Speaks English well	-0.1090
Less than high school education	-0.0185
Some college	0.0217
Four-year degree	0.0615
Advanced degree	0.0833
Hispanic American	-0.4222 **
African American	0.0068
Native American	-0.3327
Asian-Pacific American	0.0166
Other race minority	0.6244
Female	-0.2974 **

It appears that many of the same race- and gender-neutral factors important to predicting business ownership in the 2000 model also had an impact in 2008 through 2010:

- Being older was associated with a greater likelihood of owning a business but the effect was smaller for the oldest individuals;
- Higher home values were associated with a higher probability of business ownership; and
- Greater interest and dividend income was associated with a greater likelihood of owning a business.
- Although not statistically significant in 2000, a higher monthly mortgage payment was also associated with a greater likelihood of business ownership in 2008 through 2010.

After controlling for race- and gender-neutral factors, a statistically significant difference persisted in the rates of business ownership for Hispanic American and female construction workers, compared with non-Hispanic whites and males, respectively.

Simulations of business ownership rates. Using the same approach as for the 2000 data, the study team used the 2008 through 2010 results to simulate business ownership rates if minorities and women had the same probability of self-employment as similarly situated non-Hispanic whites and non-Hispanic white males, respectively. Figure F-6 shows actual and simulated ("benchmark") business ownership rates for Hispanic American and non-Hispanic white women construction workers in Washington. Again, BBC performed those simulations for only those groups where race/ethnicity or gender was a statistically significant predictor of business ownership (as shown in Figure F-5).

Figure F-6.
Comparison of actual business ownership rates to simulated rates for Washington construction workers, 2008-2010

	Self-emplo	Self-employment rate					
Group	Actual	Benchmark	(100 = parity)				
Hispanic American	8.6%	20.8%	41				
Non-Hispanic white female	17.1%	25.0%	68				

Note: As the benchmark figure can only be estimated for records with an observed (rather than imputed) 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 F-1.

Source: BBC Research & Consulting from statistical models of 2008-2010 ACS data. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

Hispanic Americans (disparity index of 41) owned construction businesses at rates that were less than half of what would be expected based on the simulated business ownership rates of similarly-situated non-Hispanic white construction workers (down from a disparity index of 60 in 2000). Results for women were similar to those in 2000. Based on the simulations, about 25 percent of non-Hispanic white women would own businesses in the construction industry if gender did not have an impact on business ownership. However, the actual 2008 through 2010 business ownership rate for women was 17 percent (disparity index of 68).

Engineering industry. BBC developed separate business ownership models for the Washington engineering industry using 2000 Census data and 2008-2010 ACS data.

Washington engineering industry in 2000. Figure F-7 presents the coefficients from the probit model predicting business ownership in the Washington engineering industry in 2000. The following race- and gender-neutral factors were statistically significant predictors of business ownership for the engineering industry in Washington in 2000:

- Being older was associated with a greater likelihood of owning a business but the effect was smaller for the oldest individuals;
- Higher home values were associated with a greater likelihood of business ownership;
- Higher levels of educational attainment (four-year and/or advanced degree) were associated with a greater likelihood of business ownership; and
- Larger numbers of people over the age of 65 in households were associated with a greater likelihood of business ownership.

Figure F-7. Washington engineering industry business ownership model, 2000

Note:

Other race minority includes Subcontinent Asian Americans.

*,** Denote statistical significance at the 90% and 95% confidence levels, respectively.

Two variables perfectly predicted business ownership and were subsequently excluded from the regression model: "Speaks English Well" was excluded because all engineering business owners spoke English well; there was only one African American business owner in the regression dataset so this observation was also excluded from the model

Source:

BBC Research & Consulting from 2000 Census data. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

Variable	Coefficient
Constant	-4.7624 **
Age	0.1144 **
Age-squared	-0.0010 **
Disabled	-0.0248
Married	-0.1879
Number of children in household	-0.0544
Number of people over 65 in household	0.3937 **
Owns home	0.1110
Home value (\$000s)	0.0000 **
Monthly mortgage payment (\$000s)	-0.0001
Interest and dividend income (\$000s)	0.0000
Income of spouse or partner (\$000s)	0.0000
Less than high school education	0.2324
Some college	0.3228
Four-year degree	0.6036 **
Advanced degree	0.4890 *
Asian-Pacific American	-0.2528
Hispanic American	0.0781
Native American	-0.7424
Other race minority	-0.3091
Female	-0.2837 **

When statistically controlling for race- and gender-neutral factors, the regression model for the Washington engineering industry indicated that women working in the industry were less likely than men to own businesses. Although minorities had lower rates of business ownership than non-minorities, the race/ethnicity terms in the model were not statistically significant, perhaps due to small sample sizes.

Simulations of business ownership rates. The study team simulated business ownership rates in the Washington engineering industry using the same approach as it used for the construction industry. Figure F-8 presents actual and simulated ("benchmark") business ownership rates for non-Hispanic white women in the Washington engineering industry. BBC performed those simulations only for women, because gender was statistically significant whereas the race/ethnicity terms were not.

Figure F-8.
Comparison of actual business ownership rates to simulated rates for Washington workers in the engineering industry, 2000

	Self-emplo	oyment rate	Disparity index
Group	Actual	Benchmark	(100 = parity)
Non-Hispanic white female	7.3%	13.1%	56

Note: As the benchmark figure can only be estimated for records with an observed (rather than imputed) 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 F-2.

Source: BBC Research & Consulting from statistical models of 2000 Census data. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

Approximately 7 percent of non-Hispanic white women in the Washington engineering industry were business owners in 2000 compared with a benchmark business ownership rate of about 13 percent (disparity index of 56). Those results indicate that women working in the Washington engineering industry own businesses at 56 percent of the rate observed for similarly-situated non-Hispanic white men (i.e., non-Hispanic white males who share the same personal, financial, and educational characteristics of non-Hispanic white females).

Washington engineering industry in 2008 through 2010. Figure F-9 presents the coefficients from the probit model predicting business ownership in the Washington engineering industry in 2008 through 2010. Unlike previous models, no race- or gender-neutral factors were significant in the 2008 through 2010 model. In contrast to the construction industry, race/ethnicity and gender were also not statistically significant predictors of business ownership in the engineering industry in 2008 through 2010.

Summary of Business Ownership in the Construction and Engineering Industries

Disparities in business ownership were present in the Washington construction industry:

- In both 2000 and 2008 through 2010, business ownership rates for Hispanic Americans and Native Americans were substantially lower than that of non-Hispanic whites. Business ownership rates were lower for African Americans in 2000 but not in 2008 through 2010.
- After statistically controlling for a number of race- and gender-neutral factors affecting business ownership, substantially fewer African Americans, Hispanic Americans, and Native Americans owned businesses than what would be expected if they owned businesses at the same rate as similarly-situated non-Hispanic whites in 2000. That disparity persisted for Hispanic Americans in 2008 through 2010.

Figure F-9. Washington engineering industry business ownership model, 2008-2010

Note:

Other race minority includes Subcontinent Asian Americans.

*,** Denote statistical significance at the 90% and 95% confidence levels, respectively.

Two variables perfectly predicted business ownership and were subsequently excluded from the regression model: "Less than High School" was excluded because only one engineering business owners had not completed high school; there were no African American business owners in the regression dataset so this observation was also excluded from the model.

Source

BBC Research & Consulting from 2008-2010 ACS data. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

Variable	Coefficient
Constant	-2.4513
Age	0.0117
Age-squared	0.0002
Disabled	-0.2297
Married	-0.0556
Number of children in household	0.0337
Number of people over 65 in household	0.0337
Owns home	-0.0093
Home value (\$000s)	0.0000
Monthly mortgage payment (\$000s)	0.0001
Interest and dividend income (\$000s)	0.0000
Income of spouse or partner (\$000s)	0.0000
Speaks English well	-0.3173
Some college	0.3313
Four-year degree	0.6024
Advanced degree	0.5826
Asian-Pacific American	-0.0776
Hispanic American	-0.6825
Native American	0.5594
Other race minority	-0.3813
Female	-0.2282

In 2000 and in 2008 through 2010, women working in the local construction industry had substantially lower rates of business ownership than men. After controlling for a number of race- and gender-neutral factors using 2000 and 2008 through 2010 data, substantial disparities persisted in business ownership rates for women.

BBC also identified disparities in business ownership rates in the Washington engineering industry:

- Asian-Pacific Americans in the Washington engineering industry owned businesses at substantially lower rates than non-Hispanic whites in 2000.
- Business ownership rates were lower for other minority groups as well (in both 2000 and 2008 through 2010), but those differences were not statistically significant in part due to smaller sample sizes for those groups.
- In 2000 and in 2008 through 2010, women working in the engineering industry in Washington had substantially lower business ownership rates than men.
- BBC used regression models to investigate the presence of race/ethnicity- and gender-based disparities in business ownership rates in 2000 and 2008 through 2010 after accounting for the effects of race- and gender-neutral factors. The results indicated substantial disparities for women in 2000.

APPENDIX G. Access to Capital for Business Formation and Success

Access to capital is one factor that researchers have examined when studying business formation and success. If race- or gender-based discrimination exists in capital markets, minorities and women may have difficulty acquiring the capital necessary to start, operate, or expand businesses. Researchers have also found that the amount of start-up capital can affect long-term business success, and, on average, minority- and women-owned businesses appear to have less start-up capital than non-Hispanic white-owned businesses and male-owned businesses. For example:

- In 2007, 30 percent of majority-owned businesses that responded to a national U.S. Census Bureau survey indicated that they had start-up capital of \$25,000 or more.⁴
- Only 17 percent of African American-owned businesses indicated a comparable amount of start-up capital and disparities in start-up capital were identified for every other minority group except Asian Americans.
- Nineteen percent of female-owned businesses reported start-up capital of \$25,000 or more compared with 32 percent of male-owned businesses (not including businesses that were equally owned by men and women).

Race- or gender-based discrimination in start-up capital can have long-term consequences, as can discrimination in access to business loans after businesses have already been formed.⁵ Appendix G presents information about homeownership and mortgage lending, because home equity can be an important source of capital to start and expand businesses. The appendix then presents information about business loans, assessing whether minorities and females experience any difficulties acquiring business capital.

Homeownership and Mortgage Lending

BBC analyzed homeownership and the mortgage lending industry to explore differences across race/ethnicity and gender that may lead to disparities in access to capital.

http://factfinder2.census.gov/faces/tableservices/isf/pages/productview.xhtml?pid=SBO_2007_00CSCB16&prodTvpe=table

¹ For example, see Mitchell, Karlyn and Douglas K. Pearce. 2005. "Availability of Financing to Small Firms Using the Survey of Small Business Finances." U.S. Small Business Administration, Office of Advocacy. 57.

² Fairlie, Robert W. and Alicia M. Robb. 2010. *Race and Entrepreneurial Success*. Cambridge: MIT Press.

³ Ibid.

⁴ Business owners were asked, "What was the total amount of capital used to start or acquire this business? (Capital includes savings, other assets, and borrowed funds of owner(s))." From U.S. Census Bureau, Statistics for All U.S. Firms by Total Amount of Capital Used to Start or Acquire the Business by Industry, Gender, Ethnicity, Race, and Veteran Status for the U.S.: 2007 Survey of Business Owners:

⁵ Fairlie, Robert W. and Alicia M. Robb. 2010. *Race and Entrepreneurial Success*. Cambridge: MIT Press.

Homeownership. Wealth created through homeownership can be an important source of capital to start or expand a business.⁶ In sum:

- A home is a tangible asset that provides borrowing power;⁷
- Wealth that accrues from housing equity and tax savings from homeownership contributes to capital formation;⁸
- Next to business loans, mortgage loans have traditionally been the second largest loan type for small businesses;⁹ and
- Homeownership is associated with an estimated 30 percent reduction in the probability of loan denial for small businesses.¹⁰

Any barriers to homeownership and home equity growth for minorities and women can affect business opportunities by constraining their available funding. Similarly, any barriers to accessing home equity through home mortgages can also affect available capital for new or expanding businesses. The study team analyzed homeownership rates and home values before considering loan denial and subprime lending.

Homeownership rates. Many studies have documented past discrimination in the national housing market. The United States has a history of restrictive real estate covenants and property laws that affect the ownership rights of minorities and women. For example, in the past, a woman's participation in homeownership was secondary to that of her husband and parents. BBC used 2000 Census and 2008-2010 American Community Survey (ACS) data to examine homeownership rates in Washington and in the United States. Figure G-1 presents homeownership rates for minority groups and non-Hispanic whites.

As shown in Figure G-1, about two-thirds of non-Hispanic white households (68%) owned homes in Washington in 2000, but homeownership rates were much lower for both African Americans (37%) and Hispanic Americans (41%). Homeownership rates in 2000 were also lower for Subcontinent Asian Americans (46%), Asian-Pacific Americans (56%), and Native Americans (53%).

⁶ The housing and mortgage crisis beginning in late 2006 has substantially impacted the ability of small businesses to secure loans through home equity. Later in Appendix G, BBC discusses the consequences of the housing and mortgage crisis on small businesses and MBE/WBEs.

⁷ Nevin, Allen. 2006. "Homeownership in California: A CBIA Economic Treatise." *California Building Industry Association*. 2.

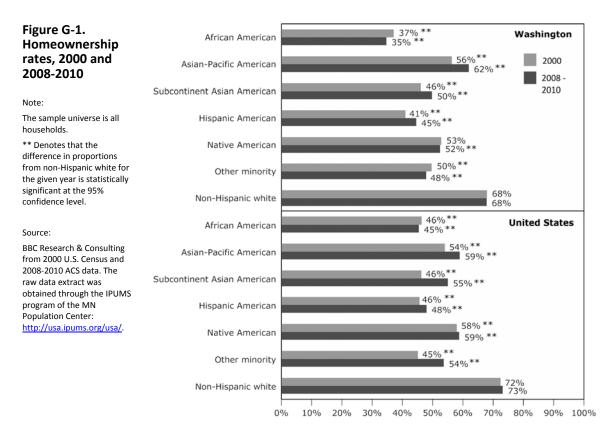
 $^{^8\,\}text{Jackman, Mary R. and Robert W. Jackman 1980.} \,\, \text{``Racial Inequalities in Home Ownership.''} \,\, \textit{Social Forces.} \,\, 58.\,\, 1221-1234.$

⁹ 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.

¹⁰ Cavalluzzo, Ken and John Wolken. 2005. "Small Business Loan Turndowns, Personal Wealth and Discrimination." *Journal of Business*. 78:2153-2178.

¹¹ Ladd, Helen F. 1982. "Equal Credit Opportunity: Women and Mortgage Credit." *The American Economic Review*. 72:166-170.

¹² Card, Emily. 1980. "Women, Housing Access, and Mortgage Credit." *Signs.* 5:215-219.



Disparities in homeownership rates between racial/ethnic minorities and non-minorities were also apparent in 2008 through 2010.¹³

- Approximately 35 percent of African American households were homeowners, compared to 68 percent of non-Hispanic white households;
- About 45 percent of Hispanic American households were homeowners;
- Homeownership rates for Subcontinent Asian Americans and Asian-Pacific Americans were
 50 percent and 62 percent, respectively; and
- Native American households owned homes at a rate of 52 percent.

In general, in both 2000 and 2008 through 2010, rates of homeownership were lower in Washington than in the nation as a whole, except for Asian-Pacific Americans and other race minorities.

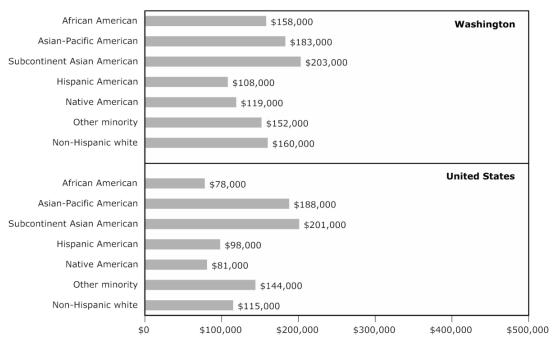
Lower rates of homeownership may reflect lower incomes for minorities. That relationship may be self-reinforcing, as low wealth puts individuals at a disadvantage in becoming homeowners, which has historically been a path to building wealth. An older study found that the probability

¹³ Although not presented in this report, the study team also examined homeownership rates for heads of households working in the construction and engineering industries. Each minority group in the construction industry and each minority group except Asian-Pacific Americans in the engineering industry had a lower rate of home ownership than non-Hispanic whites in Washington.

of homeownership is considerably lower for African Americans than it is for comparable non-Hispanic whites throughout the United States.¹⁴

Home values. Research has shown homeownership and home values to be direct determinants of available capital to form or expand businesses. ¹⁵ Using 2000 Census and 2008-2010 ACS data, BBC compared median home values by racial/ethnic group. Figure G-2 presents results for Washington and the United States as a whole in 2000.

Figure G-2. Median home values, 2000



Note: The sample universe is all owner-occupied housing units.

Source: BBC Research & Consulting from 2000 U.S. Census data. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

In 2000, the median home value of homes owned by non-Hispanic whites in Washington was approximately \$160,000, substantially greater than the median value of homes owned by Hispanic Americans (\$108,000) and Native Americans (\$119,000). The median home value for African American homeowners (\$158,000) was also below that of non-Hispanic whites. On average, Asian-Pacific Americans and Subcontinent Asian Americans owned homes of greater value than non-Hispanic whites.

Figure G-3 presents median home values by racial/ethnic groups in Washington and in the U.S. based on 2008-2010 ACS data. Similar to 2000 data, Hispanic Americans (\$200,000) and Native Americans (\$200,000) had substantially lower median home values than non-Hispanic whites (\$275,000) in Washington. In 2008-2010, African American homeowners 9\$280,000) exhibited

¹⁴ Jackman. 1980. "Racial Inequalities in Home Ownership."

¹⁵ Fairlie, Robert W. and Harry A. Krashinky. 2006. "Liquidity Constraints, Household Wealth, and Entrepreneurship Revisited." IZA Discussion Paper. No. 2201.

greater median home values than non-Hispanic whites. Median home values for Asian-Pacific Americans (\$348,000) and Subcontinent Asian Americans (\$410,000) were also higher than non-Hispanic whites in Washington. Similar trends were evident in the United States as a whole, except for African American homeowners (\$130,000), who had a median home value substantially lower than that of non-Hispanic white homeowners (\$180,000).

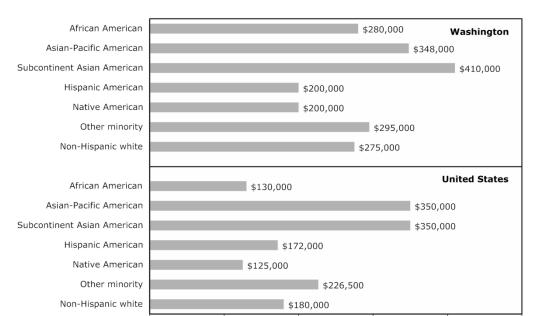


Figure G-3. Median home values, 2008-2010

Note: The sample universe is all owner-occupied housing units.

\$0

Source: BBC Research & Consulting from 2008-2010 American Community Survey data. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

\$100,000

\$200,000

\$300,000

\$400,000

\$500,000

Mortgage lending. Minorities may be denied opportunities to own homes, to purchase more expensive homes, or to access equity in their homes if they are discriminated against when applying for home mortgages. In a recent lawsuit, Bank of America paid \$335 million to settle allegations that its Countrywide Financial unit discriminated against African American and Hispanic American borrowers between 2004 and 2008. The case was brought by the Securities and Exchange Commission after finding evidence of "statistically significant disparities by race and ethnicity" among Countrywide Financial customers.¹⁶

BBC explored market conditions for mortgage lending in Washington and in the nation as a whole. The best available source of information concerning mortgage lending is Home Mortgage Disclosure Act (HMDA) data, which contain information on mortgage loan applications that financial institutions, savings banks, credit unions, and some mortgage companies receive.¹⁷

¹⁶ Savage, Charlie. December 22, 2011. "\$335 Million Settlement on Countywide Lending Bias." *NYTimes.com*. Available online at: http://www.nytimes.com/2011/12/22/business/us-settlement-reported-on-countrywide-lending.html

 $^{^{17}}$ Financial institutions were required to report 2010 HMDA data if they had assets of more than \$39 million (\$35 million for 2006), 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 data if they are for-profit institutions, had home

Those data include information about the location, dollar amount, and types of loans made, as well as race/ethnicity, income, and credit characteristics of all loan applicants. The data are available for home purchases, loan refinances, and home improvement loans.

BBC examined HMDA statistics provided by the Federal Financial Institutions Examination Council (FFIEC) on conventional loan denial rates for high-income borrowers. Conventional loans are loans that are not insured by a government program. High-income borrowers are those households with 120 percent or more of the U.S. Department of Housing and Urban Development (HUD) area median family income. Loan denial rates are calculated as the percentage of mortgage loan applications that were denied, excluding applications that the potential borrowers terminated.

BBC examined mortgage denial rates for 2006, 2009, and 2010. Although 2010 provides the most current representation of the home mortgage market, the 2006 data represent a more complete data set from before the recent mortgage crisis. Many of the institutions that originated loans in 2006 were no longer in business by the 2010 reporting date for HMDA data. For example, the 2006 HMDA data include information about 870,000 loan applications in Washington that approximately 900 lenders processed. The 2010 HMDA data for Washington include information about 470,000 loan applications that about 600 lenders processed. In addition, the percentage of government-insured loans, which the study team did not include in its analysis, increased dramatically between 2006 and 2010, decreasing the proportion of total loans that the study team analyzed in the 2010 data.

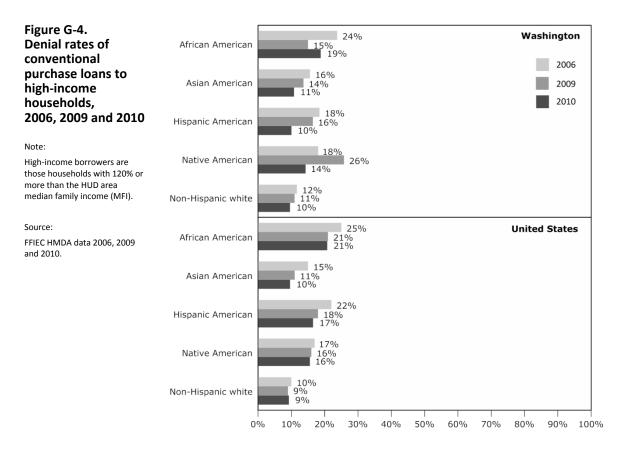
Figure G-4 presents loan denial results for Washington and the U.S. in 2006, 2009, and 2010. Data for 2006 show higher denial rates for all groups in Washington compared with 2010. African American, Asian American, Hispanic American, and Native American high-income applicants all exhibited higher loan denial rates compared with non-Hispanic white applicants in 2006.

purchase loan originations exceeding 10 percent of all loan obligations in the past year, are located in a Metropolitan Statistical Area (MSA; 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.

¹⁸ The median family income in 2010 was about \$61,000 for the United States as a whole and \$67,000 for Washington (in 2010 dollars). Median family income for 2006 was about \$63,000 for the United States as a whole and \$69,000 for Washington (in 2010 dollars). Source: U.S. Census Bureau, 2010 and 2006 American Community Surveys.

¹⁹ According to an article by the Federal Reserve, the volume of reported loan applications and originations fell sharply from 2007 to 2008 after previously falling between 2006 and 2007. See Avery, Brevoort, and Canner, "The 2008 HMDA Data: The Mortgage Market during a Turbulent Year." Available online: http://www.federalreserve.gov/pubs/bulletin/2009/pdf/hmda08draft.pdf.

²⁰ Loans insured by government programs have surged since 2006. In 2006, about 10 percent of first lien home loans were insured by a government program. More than half of home loans were insured by the government in 2009. Source: "The 2009 HMDA Data: The Mortgage Market in a Time of Low Interest Rates and Economic Distress," *Federal Reserve Bulletin*. December 2010, pp A39-A77.



In 2010, loan denial rates remained high for both African American and Native American loan applicants in Washington:

- Among African American applicants, 19 percent had their applications denied, much higher than the 10 percent for non-Hispanic white applicants.
- Loan denial rates in 2010 were also higher for Native Americans (14%) compared with non-Hispanic white applicants.

Additional research. Several national studies have examined disparities in loan denial rates and loan amounts for minorities in the presence of other influences. For example:

A study by the Federal Reserve Bank of Boston is one of the most cited studies of mortgage lending discrimination.²¹ It was conducted using the most comprehensive set of credit characteristics ever assembled for a study on mortgage discrimination.²² The study provided persuasive evidence that lenders in the Boston area discriminated against minorities in 1990.²³

²¹ 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.

²² Ladd, Helen F. 1998. "Evidence on Discrimination in Mortgage Lending." The Journal of Economic Perspectives. 12:41-62.

 $^{^{23}}$ Yinger, John. 1995. *Closed Doors, Opportunities Lost: The Continuing Costs of Housing Discrimination*. New York: Russell Sage Foundation, 71.

- Using the Federal Reserve Board's 1983 Survey of Consumer Finances and the 1980 Census of Population and Housing data, analyses revealed that minority households were one-third as likely to receive conventional loans as non-Hispanic white households after taking into account financial and demographic variables.²⁴
- Findings from a Midwest study indicate a 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 loans and of smaller sizes compared to their white counterparts.²⁵

However, other studies have found that differences in preferences for Federal Housing Administration (FHA) loans — mortgage loans that that the government insures — versus conventional loans among racial and ethnic groups may partially explain disparities found in conventional loan approvals between minorities and non-minorities. Several studies have found that, historically, minority borrowers are far more likely to seek FHA loans than comparable non-Hispanic white borrowers across different income and wealth levels. The insurance on FHA loans protects the lender, but the borrower can be disadvantaged by higher borrowing costs. ^{27, 28}

Subprime lending. Loan denial is only one of several ways minorities might be discriminated against in the home mortgage market. Mortgage lending discrimination can also occur through higher fees and interest rates. Subprime lending provides a unique example of such types of discrimination through fees associated with various loan types.

Until recent years, 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. In 2006, subprime loans represented about one-fifth of all mortgages in the United States.²⁹ With higher interest rates than prime loans, subprime loans were historically marketed to customers with blemished or limited credit histories who would not typically qualify for prime loans. Over time, subprime loans also became available to homeowners who did not want to make a down payment, did not want to provide proof of income and assets, or wanted to purchase a home with a cost above that for which they would qualify from a prime lender.³⁰ Because of higher interest rates and additional costs, subprime loans affected homeowners' ability to grow home equity and increased their risks of foreclosure.

²⁴ 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.

²⁵ 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.

²⁶Canner. 1991. "Race, Default Risk and Mortgage Lending: A Study of the FHA and Conventional Loan Markets."

²⁷ Yinger. 1995. Closed Doors, Opportunities Lost: The Continuing Costs of Housing Discrimination. 80.

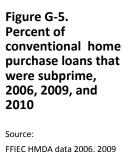
²⁸ See definition of subprime loans discussed on the following page.

²⁹ Avery, Brevoort, and Canner, "The 2006 HMDA Data." Federal Reserve Bulletin, December 2007, pp. A73-A109.

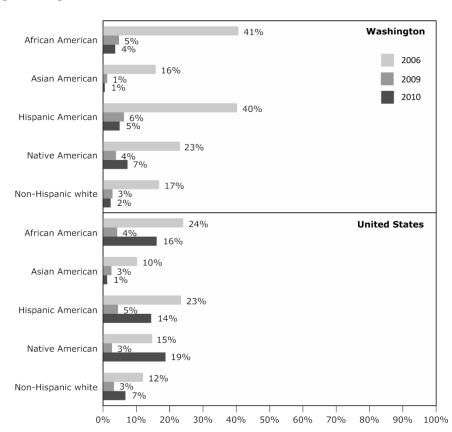
³⁰ Gerardi, Shapiro, and P. Willen. 2008. "Subprime Outcomes: Risky Mortgages, Homeownership Experiences, and Foreclosure. *Federal Reserve Bank of Boston*.

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 loans with substantially above-average interest rates — to measure rates of subprime lending in 2006, 2009, and 2010.³¹ Because lending patterns and borrower motivations differ depending on the type of loan being sought, the study team separately considered home purchase loans and refinance loans. Patterns in subprime lending did not differ substantially between the different types of loans.

Figure G-5 shows the percent of conventional home purchase loans that were subprime in Washington and the United States, based on 2006, 2009, and 2010 HMDA data. The rates of subprime lending in 2009 and 2010 were dramatically lower overall than in 2006 due to the collapse of the mortgage lending market in the late 2000s.



and 2010.



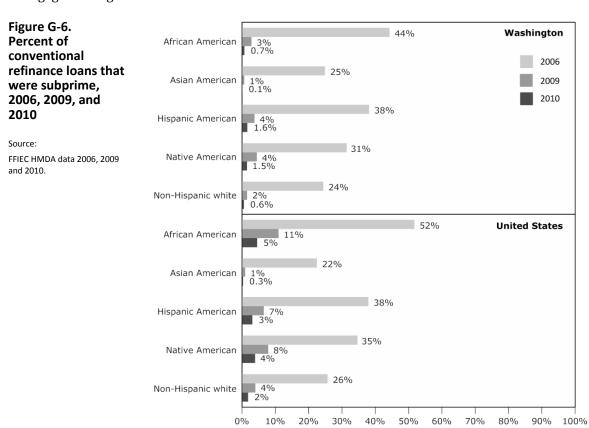
In Washington in 2006, 2009, and 2010, African American, Hispanic American, and Native American borrowers were more likely to receive subprime home purchase loans than non-Hispanic whites.

³¹ Prior to October 2009, first lien loans were identified as subprime if they had an annual percentage rate (APR) that was 3.0 percentage points or greater than the federal treasury security rate of like maturity. As of October 2009, rate spreads in HMDA data were calculated as the difference between APR and Average Prime Offer Rate, with subprime loans defined as 1.5 percentage points of rate spread or more. BBC identified subprime loans according to those measures in the corresponding time periods.

- In 2006, 17 percent of home purchase loans issued to non-Hispanic whites were subprime.
- By contrast, 41 percent of home purchase loans that were issued to African Americans were subprime.
- Similarly, 40 percent of home purchase loans that were issued to Hispanic Americans and 23 percent of home purchase loans issued to Native Americans were subprime.

Those subprime lending patterns were also observed in 2009 and 2010. In 2010, 2.3 percent of home purchase loans issued to non-Hispanic whites were subprime compared to 3.7 percent of home purchase loans issued to African Americans, 5.0 percent of home purchase loans issued to Hispanic Americans, and 7.4 percent of home purchase loans issued to Native Americans. Asian Americans who applied for home purchase loans in Washington were less likely than non-Hispanic whites to be issued subprime loans in 2006, 2009, and 2010.

Figure G-6 presents the percentage of home refinance loans that were subprime in Washington and the United States. As with home purchase loans, the rates of subprime lending in 2009 and 2010 were dramatically lower for refinance loans than in 2006 due to the collapse of the mortgage lending market in the late 2000s.



Among borrowers receiving refinance loans in Washington in 2006, 2009, and 2010, African Americans, Hispanic Americans, and Native Americans were more likely to receive subprime refinance loans than non-Hispanic whites. In 2006, about 44 percent of refinance loans issued to African Americans, 38 percent of refinance loans issued to Hispanic Americans, and 31 percent

of refinance loans issued to Native Americans were subprime. In contrast, only 24 percent of refinance loans issued to non-Hispanic whites in 2006 were subprime.

By 2010, subprime loans made up a much smaller proportion of the total conventional home refinance loans issued in that year (in Washington and the United States). The decrease in subprime refinance loans was evident for all racial/ethnic groups in Washington. Hispanic American and Native American households that received refinance loans in 2010 were still somewhat more likely than non-Hispanic whites to be issued subprime loans. Asian Americans who applied for home purchase loans in Washington were more likely than non-Hispanic whites to be issued subprime loans in 2006 but less likely to be issued subprime loans in 2009 and 2010.

Additional research. Some evidence suggests that lenders sought out and offered subprime loans to individuals who often would not be able to pay off the loan, a form of "predatory lending." Furthermore, some research has found that many recipients of subprime loans could have qualified for prime loans. Previous studies of subprime lending suggest that predatory lenders have disproportionately targeted minorities. A 2001 HUD study using 1998 HMDA data found that subprime loans were disproportionately concentrated in African American neighborhoods compared with white neighborhoods, even after controlling for income. For example, borrowers in higher-income African American neighborhoods were six times more likely to refinance with subprime loans than borrowers in higher-income white neighborhoods.

Implications of 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. Much of the blame has been placed on risky practices in the mortgage industry including substantial increases in subprime lending. As discussed above, the number of subprime mortgages increased at an extraordinary rate between the mid-1990s and mid-2000s. Those high-cost, high-interest loans increased from 8 percent of originations in 2003 to 20 percent in 2005 and 2006. The preponderance of subprime lending is important, because households that are repaying subprime loans have a greater likelihood of delinquency or foreclosure. A 2008 study released from the Federal Reserve Bank of Boston found that, "homeownerships that begin with a subprime purchase mortgage end up in foreclosure almost

³² 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."

³³ 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*.

³⁴ Department of Housing and Urban Development (HUD) and the Department of Treasury. 2001.

³⁵ Joint Center for Housing Studies of Harvard University. 2008. "The State of the Nation's Housing."

³⁶ Ibid.

20 percent of the time, or more than six times as often as experiences that begin with prime purchase mortgages."³⁷

Such problems substantially impact the ability of homeowners to secure capital through home mortgages to start or expand small businesses. That issue has been 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:

- 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."38
- 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 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."³⁹

Federal Reserve Chairman Ben Bernanke recognized the reality of those concerns in a speech titled "Restoring the Flow of Credit to Small Businesses" on July 12, 2010.⁴⁰ 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 businesses in late-2009 to investigate how the recession impacted access to capital.^{41,42} 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

³⁷ Gerardi, Shapiro, and P. Willen. 2008. "Subprime Outcomes: Risky Mortgages, Homeownership Experiences, and Foreclosure. *Federal Reserve Bank of Boston*.

³⁸ 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."

³⁹ 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.*

⁴⁰ 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.*

 $^{^{41}}$ 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 individuals.

⁴² National Federation of Independent Business (NFIB). 2010. Small Business Credit in a Deep Recession.

estate and 13 percent held "upside-down" property — that is, property for which the mortgage is worth more than its appraised value.

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, especially for homeowners with subprime loans, reflect shrinking access to capital available through such loans. Those consequences are likely to have a disproportionate impact on minorities in terms of both homeownership and the 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. Those areas are often racially determined, such as African American or mixed-race neighborhoods.⁴³ That practice can perpetuate problems in already poor neighborhoods.⁴⁴ 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 with the individual characteristics of the borrower.⁴⁵ Some studies found that the race of an applicant — but not the racial makeup of the neighborhood — to be a factor in loan denials.

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. Such practices can deter minorities from starting businesses. Locations of financial institutions are important to small business start up, because local banking sectors often finance local businesses. Redlining practices would deny that resource to minorities.

Steering by real estate agents. Historically, differences in the types of loans that are issued to minorities have also been attributed to "steering" by real estate agents, who serve as an information filter.⁴⁸ Despite the fact that steering has been prohibited by law for many decades, some studies claim that real estate brokers provide different levels of assistance and different

⁴³ 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.

⁴⁴ Ladd, Helen F. 1998. "Evidence on Discrimination in Mortgage Lending." *The Journal of Economic Perspectives*. 12:41-62.

⁴⁵ 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.

 $^{^{46}}$ Yinger, John. 1995. "Closed Doors, Opportunities Lost: The Continuing Costs of Housing Discrimination." Russell Sage Foundation. New York. 78-79.

⁴⁷ Holloway. 1998. "Exploring the Neighborhood Contingency of Race Discrimination in Mortgage Lending in Columbus, Ohio."

⁴⁸ Kantor, Amy C. and John D. Nystuen. 1982. "De Facto Redlining a Geographic View." *Economic Geography*. 4:309-328.

information on loans to minorities than they do to non-minorities.⁴⁹ Such steering can affect the perception of minority borrowers about the availability of mortgage loans.

Gender discrimination in mortgage lending. Relatively little information is available on gender-based discrimination in mortgage lending markets. Historically, lending practices overtly discriminated against women by requiring information on marital and childbearing status. Perceived risks associated with granting loans to women of childbearing age and unmarried women resulted in "income discounting," limiting the availability of loans to women.⁵⁰

The Equal Credit Opportunity Act in 1973 suspended such discriminatory lending practices. However, certain barriers affecting women have persisted after 1973 in mortgage lending markets. For example, there is some past evidence that lenders under-appraised properties for female borrowers.⁵¹

Access to Business Capital

Barriers to capital markets can have substantial impacts on small business formation and expansion. For example, during interviews and public meetings that WSDOT held in 2012, "discrimination in obtaining loans due to race and gender" was identified as a barrier to business success. In addition, several studies have found evidence that start-up capital is important for business profits, longevity, and other outcomes.

- The amount of start-up capital is associated with small business sales and other outcomes;⁵²
- Limited access to capital has affected the size of African American-owned businesses;^{53,54}
 and
- Weak financial capital was identified as a reason that more African American-owned businesses than non-Hispanic white-owned businesses closed over a four-year period.⁵⁵

⁴⁹ Yinger. 1995. Closed Doors, Opportunities Lost: The Continuing Costs of Housing Discrimination. 78–79.

⁵⁰ Card. 1980. "Women, Housing Access, and Mortgage Credit."

⁵¹ Ladd, Helen F. 1982. "Equal Credit Opportunity: Women and Mortgage Credit." *The American Economic Review*. 72:166-170.

⁵² 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."

⁵³ Grown, C. and Bates, T. 1992. "Commercial Bank Lending Practices and the Development of Black-Owned Construction Companies." Journal of Urban Affairs, 14: 25–41.

⁵⁴ Fairlie, Robert W. and Alicia M. Robb. 2010. Race and Entrepreneurial Success. Cambridge: MIT Press.

⁵⁵ Grown, C. and Bates, T. 1992. "Commercial Bank Lending Practices and the Development of Black-Owned Construction Companies." Journal of Urban Affairs, 14: 25–41.

Bank loans are one of the largest sources of debt capital for small businesses.⁵⁶ Discrimination in the application and approval processes of those loans and other credit resources could be detrimental to the success of minority- and women-owned businesses. Previous studies have addressed race/ethnicity and gender discrimination in capital markets by evaluating:

- Loan denial rates:
- Loan values;
- Interest rates;
- Business owners' fears 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 SSBF — the most comprehensive national source of credit characteristics of small businesses (those with fewer than 500 employees). The survey contains information on loan denial and interest rates as well as anecdotal information from businesses. The samples from 1998 and 2003 contain records for 3,521 and 4,240 businesses, respectively. The study team applied sample weights to provide representative estimates of loan denial and interest rates.

The SSBF records the geographic location of businesses by Census Division, not by city, county, or state. The Pacific Census Division (referred to throughout this report as the Pacific region) contains data from Washington, along with Alaska, California, Oregon, and Hawaii. The Pacific region is the level of geographic detail of SSBF data most specific to Washington, and 2003 is the most recent information available from the SSBF because the survey was discontinued after that year.

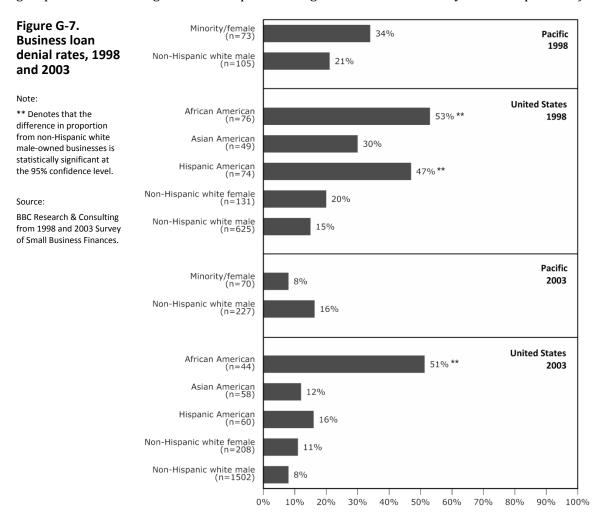
Loan denial rates. Figure G-7 presents loan denial rates from the 1998 and 2003 SSBFs for the Pacific region and for the United States.⁵⁷ National SSBF data for 1998 reveal that African American-, Asian American-, and Hispanic American-owned businesses exhibited loan denial rates that were considerably higher than that of non-Hispanic white male-owned businesses. In 2003, the loan denial rate for African American-owned businesses (51%) in the United States remained substantially higher than for non-Hispanic white male-owned businesses.

As shown in Figure G-7, about 34 percent of minority- and women-owned businesses in the Pacific region reported being denied loans in 1998, a larger percentage than the 21 percent of non-Hispanic white male-owned businesses that reported being denied loans. According to 2003 SSBF data, a smaller percentage of minority- and female-owned businesses in the Pacific

⁵⁶ Data from the 1998 SSBF indicate that 70 percent of loans to small business are from commercial banks. That result is present across all gender and racial/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.*

⁵⁷ The denial rates represent the proportion of business owners whose loan applications over the previous three years were always denied, compared to business owners whose loan applications were always approved or sometimes approved.

region were denied loans compared to non-Hispanic white male-owned businesses, which was inconsistent with national results for that year. (Loan denial statistics on individual minority groups in the Pacific region are not reported in Figure G-7 due to relatively small sample sizes.)



Other researchers' regression analyses of loan denial rates. Several studies have investigated whether disparities in loan denial rates for different racial/ethnic and gender groups exist after controlling for other factors that affect loan approvals. Findings from those studies include the following:

- Commercial banks are less likely to loan to African American-owned businesses than to non-Hispanic white-owned businesses after statistically controlling for other factors.⁵⁸
- African American, Hispanic American, and Asian American men are more likely to be denied loans than non-Hispanic white men. However, African American borrowers are more likely to apply for loans.⁵⁹

⁵⁸ 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.

⁵⁹ 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.

- Disparities in loan denial rates between African American-owned and non-Hispanic whiteowned businesses 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 businesses.⁶⁰
- The probability of loan denial decreases with greater personal wealth. However, accounting for personal wealth does not account for the large differences in denial rates across African American-, Hispanic American-, Asian American-, and non-Hispanic white-owned businesses. Specifically, information about personal wealth explained some differences between Hispanic- and Asian American-owned businesses and non-Hispanic white-owned businesses, but they explained almost none of the differences between African American-owned businesses and non-Hispanic white-owned businesses.
- Loan denial rates are higher for African American-owned businesses than for non-Hispanic white-owned businesses after accounting for several factors such as creditworthiness and other characteristics. That result is largely insensitive to different model specifications. Consistent evidence on loan denial rates and other indicators of discrimination in credit markets was not found for other minorities or for women.⁶²
- Women-owned businesses are no less likely to apply or to be approved for loans in comparison to male-owned businesses.⁶³
- Charles River Associates (CRA) incorporated the 2003 SSBF in a study prepared for the Santa Clara Valley Transportation Authority (also located in the Pacific region). Combining data from the 1998 and 2003 SSBFs "to increase precision of estimates," the CRA study revealed possible disparities in loan denial rates based on race/ethnicity and gender using a probit econometric model and controlling for other factors. CRA's results indicate that African American-owned businesses had the highest probabilities of loan denial. They also reported that Hispanic American- and Asian American-owned businesses were more likely to be denied loans.⁶⁴

BBC regression model for denial rates in the SSBF. The BBC study team conducted its own analysis of the SSBF by developing a model to explore the relationships between loan denial and the race/ethnicity and gender of business owners while statistically controlling for other factors. As discussed above, there is extensive literature on business loan denials that provides the theoretical basis for the regression models. Many studies have used probit econometric models to investigate the effects of various owner, business, and loan characteristics on the likelihood of

 $^{^{60}}$ Cavalluzzo, 2002. "Competition, Small Business Financing and Discrimination: Evidence from a New Survey."

⁶¹ Cavalluzzo, Ken and John Wolken. 2002. "Small Business Turndowns, Personal Wealth and Discrimination." FEDS Working Paper No. 2002-35.

⁶² 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.

⁶³ Coleman. 2002. "Characteristics and Borrowing Behavior of Small, Women-owned Firms: Evidence from the 1998 National Survey of Small Business Finances."

⁶⁴ CRA International. 2007. "Measuring Minority- and Woman-Owned Construction and Professional Service Firm Availability and Utilization." *Prepared for Santa Clara Valley Transportation Authority.*

loan denial. The standard model includes three general categories of variables that the study team used:

- Owners' demographic characteristics (including race and gender), credit, and resources (14 variables);
- Business characteristics and credit and financial health (29 variables); and
- The environment in which businesses and lenders operate and characteristics of the loans (19 variables).⁶⁵

BBC developed two models, one for the 1998 SSBF and one for the 2003 SSBF using those standard variables. After excluding a small number of observations where the loan outcome was imputed, the 1998 national sample included 931 businesses that had applied for a loan during the three years preceding the 1998 SSBF and the Pacific region included 172 such businesses. The 2003 national sample included 1,897 businesses that had applied for a loan during the three years preceding the 2003 SSBF and the Pacific region included 298 such businesses.

Given the relatively small sample size for the Pacific region and the large number of variables in the model, the study team included all U.S. businesses in the model and estimated any Pacific region effects by including regional control variables — an approach commonly used in other studies that analyze SSBF data.⁶⁶ The regional variables include an indicator variable for businesses located in the Pacific region and interaction variables that represent businesses owned by minorities or women that are located in the Pacific region.⁶⁷

1998 SSBF regression results. Figure G-8 presents the marginal effects from the 1998 probit model predicting loan denials. The dependent variable represented whether a business' loan applications over the past three years were always denied. The results from the model indicate that a number of race- and gender-neutral factors significantly affect the probability of loan denial. Those effects include the following:

- Being an older business owner is associated with a greater likelihood of loan denial;
- Having a four-year college degree or advanced degree is associated with a lower probability of loan denial;
- More equity in the business owner's home if he or she is a homeowner is associated with a lower probability of loan denial;

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⁶⁵ 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*.

⁶⁶ 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; NERA Economic Consulting. 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*.

 $^{^{67}}$ BBC also considered an interaction variable to represent firms that are both minority and female but the term was not significant in 1998 or 2003.

Figure G-8. Likelihood of business loan denial (probit regression) in the U.S. in the 1998 SSBF, Dependent variable: loan denial

Variable	Marginal Effect	Variable	Marginal Effect	Variable	Marginal Effect
Race/ethnicity and gender		Firm's characteristics, credit and financial health		Firm and lender environment and loar	characteristics
African American	0.357 **	D&B credit score = moderate risk	0.094	Partnership	0.015
Asian American	0.015	D&B credit score = average risk	0.110	S corporation	-0.022
Hispanic American	0.213 **	D&B credit score = significant risk	0.063	C corporation	-0.030
Female	-0.024	D&B credit score = high risk	0.066	Construction industry	0.098 **
Pacific region	0.012	Total employees	0.000	Manufacturing industry	0.005
African American in Pacific region	-0.064	Percent of business owned by principal	0.000	Transportation, communications	
Asian American in Pacific region	0.041	Family-owned business	0.076 **	and utilities industry	0.074
Hispanic American in Pacific region	-0.008	Firm purchased	-0.039	Finance, insurance and	
Female in Pacific region	0.093	Firm inherited	0.022	real estate industries	-0.022
		Firm age	-0.002	Engineering industry	0.122
Owner's characteristics, credit and resources		Firm has checking account	0.030	Other industry	0.035
Age	0.002 *	Firm has savings account	-0.029	Herfindahl index = .10 to .18	0.390 **
Owner experience	0.001	Firm has line of credit	-0.124 **	Herfindahl index = .18 or above	0.369 **
Less than high school education	0.075	Existing capital leases	-0.008	Located in MSA	0.006
Some college	-0.017	Existing mortgage for business	-0.045 *	Sales market local only	0.021
Four-year degree	-0.061 **	Existing vehicle loans	-0.067 **	Loan amount	0.000
Advanced degree	-0.043	Existing equipment loans	-0.056 **	Capital lease application	-0.024
Log of Home Equity	-0.010 **	Existing loans from stockholders	0.111 **	Business mortgage application	-0.066 **
Bankruptcy in past 7 years	0.315 **	Other existing loans	-0.010	Vehicle loan application	-0.093 **
Judgement against in past 3 years	0.228 **	Firm used trade credit in past year	-0.038	Equipment loan application	-0.072 **
Log of net worth excluding home	0.001	Log of total sales in prior year	0.000	Loan for other purposes	-0.036
Owner has negative net worth	-0.025	Negative sales in prior year	0.073		
		Log of cost of doing business in prior year	0.002		
		Log of total assets	0.005		
		Negative total assets	-0.045		
		Log of total equity	0.015		
		Negative total equity	0.241		
		Firm bankruptcy in past 7 years	0.228 *		
		Firm delinquency in business transactions	0.258 **		

Note:

For ease of interpretation the marginal effects of the probit coefficients are displayed in the figure. Significance is calculated using t-statistics from the probit coefficients associated with the marginal effects.

"Native American or other minority" and "Mining industry" perfectly predicted loan outcome and dropped out of the regression.

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

^{*} Statistically significant at 90% confidence level.

^{**} Statistically significant at 95% confidence level.

- Being a business that filed for bankruptcy in the past seven years or that has been delinquent in business transactions is associated with a higher probability of loan denial;
- Being a business owner who filed for bankruptcy in the past seven years or has had a
 judgment against him or her is associated with a higher probability of loan denial;
- Being a family-owned business is associated with a greater likelihood of loan denial;
- Having an existing line of credit, an existing mortgage, or existing vehicle or equipment
 loans is associated with a lower likelihood of loan denial; however, having outstanding loans
 from stockholders is associated with a higher likelihood of loan denial;
- Being in the construction or engineering industry is associated with a higher probability of loan denial;
- Being in highly concentrated industry segments (as measured by the Herfindahl index) is associated with a higher probability of loan denial; and
- Applying for business mortgages and vehicle and equipment loans is associated with a lower probability of loan denial.

After statistically controlling for race- and gender-neutral influences, the study team observed that businesses owned by African Americans and Hispanic Americans were more likely to have their loans denied than other businesses. The indicator variable for the Pacific region and the interaction terms for Pacific region and status as a minority- or female-owned business were not statistically significant. That result indicates that the probability of loan denials for minority-and women-owned businesses within the Pacific region are not significantly different from the U.S. as a whole after accounting for other factors.

The study team simulated loan approval rates for those minority groups with statistically significant disparities (i.e., African American- and Hispanic American-owned businesses) by comparing observed approval rates with simulated approval rates. "Loan approval" means that a business owner always, or at least sometimes, had his or her business loan applications approved over the previous three years. "Rates" of loan approval means the percentage of businesses that received loan approvals (always or sometimes) during that time period. Approval rates were calculated by subtracting the denial rate from 100 (e.g., a denial rate of 46.4% would indicate an approval rate of 53.6%).

The probit modeling approach allowed for simulations of loan approval rates for those groups as if they had the same probability of loan approval as similarly situated non-Hispanic white male-owned businesses. To conduct those simulations, BBC took the following steps:

- 1. BBC performed a probit regression analysis predicting loan approval using only non-Hispanic white male-owned businesses in the dataset.⁶⁸
- 2. The study team then used the coefficients from that model and the mean characteristics of African American- and Hispanic American-owned businesses (including the effects of a

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⁶⁸ That version of the model excluded the race/ethnicity and gender indicator variables, because the value of all of those variables would be the same (i.e., 0).

business being in the Pacific region) to estimate the probability of loan approval of such groups.

The results of those simulations yielded estimates of loan approval rates for non-Hispanic white-owned businesses who shared the same characteristics of African American- and Hispanic American-owned businesses. Higher simulated rates indicate that, in reality, African American- and Hispanic American-owned businesses are less likely to be approved for loans than similarly-situated non-Hispanic white male-owned businesses. Figure G-9 shows those simulated loan approval rates ("benchmark") in comparison to the actual approval rates observed in the 1998 SSBF. The disparity index was calculated by taking the actual loan approval rate for each group and dividing it by each group's benchmark, and then multiplying the result by 100. Values less than 100 indicate that, in reality, the group is less likely to be approved for a loan than what would be expected for similarly-situated non-Hispanic white male-owned businesses — in other words that race/ethnicity affects the likelihood of those groups being approved for loans.

Figure G-9.
Comparison of actual loan approval rates to simulated loan approval rates, 1998

	Loan ap	proval rates	Disparity index
Group	Actual	Benchmark	(100 = parity)
African American	46.4%	76.8%	60
Hispanic American	53.7%	75.9%	71

Note: Actual approval rates presented here and denial rates in Figure G-7 do not sum to 100% because some observations were dropped in the probit regression.

"Loan approval" means that a business owner always or at least sometimes had his or her business loan applications approved over the previous three years.

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

Based on 1998 SSBF data, the actual loan approval rate for African American-owned businesses was 46 percent. Model results showed that African American-owned businesses would have an approval rate of about 77 percent if they were approved for loans at the same rate as similarly-situated non-Hispanic white male-owned businesses (disparity index of 60). Similarly, Hispanic American-owned businesses would have an approval rate of about 76 percent if they were approved for loans at the same rate as similarly-situated non-Hispanic white male-owned businesses, compared with their actual loan approval rate of 54 percent (disparity index of 71).

2003 SSBF regression results. BBC also conducted a regression analysis with 2003 SSBF data.⁶⁹ As in the 1998 regression analysis, the dependent variable represented whether a business' loan applications over the past three years were always denied. Figure G-10 presents the marginal effects from the probit model predicting loan denial. In the 2003 model, the following race- and gender-neutral factors significantly affected the probability of loan denial:

⁶⁹ The 2003 SSBF contains multiple implicates (five copies of each record) to better address the issue of missing values. The values of all reported variables remain constant across the five implicates, but the values of imputed variables may differ. Only 1.8 percent of all values were missing and were imputed. BBC's regression analysis is performed on the first implicate.

Figure G-10. Likelihood of business loan denial (probit regression) in the U.S. in the 2003 SSBF, Dependent variable: loan denial

0.256 ** -0.017	Firm's characteristics, credit and financial health D&B credit score = moderate risk		Firm and lender environment and loan c	
	D&B credit score = moderate risk		Tilli and lender environment and loan c	haracteristics
-0.017		-0.007	Partnership	-0.006
	D&B credit score = average risk	0.036 *	S corporation	0.030 **
-0.011	D&B credit score = significant risk	0.017	C corporation	0.040 *
0.031	D&B credit score = high risk	0.059 **	Construction industry	0.029
0.019	Total employees	0.000	Manufacturing industry	0.013
0.057 **	Percent of business owned by principal	0.000	Transportation, communications	
-0.032	Family-owned business	-0.023	and utilities industry	0.177 **
0.033	Firm purchased	0.002	Finance, insurance and	
0.026	Firm inherited	-0.036 **	real estate industries	0.016
-0.017	Firm age	-0.001 **	Engineering industry	-0.003
-0.030 *	Firm has checking account	-0.147 *	Other industry	0.003
	Firm has savings account	-0.025 **	Herfindahl index = .10 to .18	0.000
	Firm has line of credit	-0.085 **	Herfindahl index = .18 or above	0.028
-0.001	Existing capital leases	-0.006	Located in MSA	0.023 *
0.002 **	Existing mortgage for business	0.021	Sales market local only	0.014
-0.010	Existing vehicle loans	0.018	Loan amount	0.000
-0.003	Existing equipment loans	-0.012	Capital lease application	-0.017
-0.026 *	Existing loans from stockholders	0.021	Business mortgage application	-0.032 **
0.001	Other existing loans	0.030 *	Vehicle loan application	-0.051 **
0.098 *	Firm used trade credit in past year	0.000	Equipment loan application	-0.019
0.017	Log of total sales in prior year	-0.012 *	Loan for other purposes	-0.022 *
0.000	Log of cost of doing business in prior year	-0.002		
	Log of total assets	0.001		
	Log of total equity	-0.001		
	Negative total equity	0.010		
	Firm bankruptcy in past 7 years	-0.026		
	Firm delinquency in business transactions	0.012		
	0.031 0.019 0.057 ** -0.032 0.033 0.026 -0.017 -0.030 * -0.001 0.002 ** -0.010 -0.003 -0.026 * 0.001 0.098 * 0.017	0.031 D&B credit score = high risk 0.019 Total employees 0.057 ** Percent of business owned by principal -0.032 Family-owned business 0.033 Firm purchased 0.026 Firm inherited -0.017 Firm age -0.030 * Firm has checking account Firm has savings account Firm has line of credit -0.001 Existing capital leases 0.002 ** Existing mortgage for business -0.010 Existing vehicle loans -0.003 Existing equipment loans -0.026 * Existing loans from stockholders 0.001 Other existing loans 0.098 * Firm used trade credit in past year 0.017 Log of total sales in prior year 0.000 Log of cost of doing business in prior year Log of total sasets Log of total equity Negative total equity Firm bankruptcy in past 7 years	0.031 D&B credit score = high risk 0.059 ** 0.019 Total employees 0.000 0.057 ** Percent of business owned by principal 0.000 -0.032 Family-owned business -0.023 0.033 Firm purchased 0.002 0.026 Firm herited -0.036 ** -0.017 Firm age -0.001 ** -0.030 * Firm has checking account -0.147 * Firm has savings account -0.147 * * Firm has line of credit -0.025 ** Firm has line of credit -0.085 ** -0.001 Existing capital leases -0.006 0.002 ** Existing mortgage for business 0.021 -0.010 Existing vehicle loans 0.018 -0.002 * Existing loans 0.012 -0.026 * Existing loans from stockholders 0.021 -0.026 * Existing loans from stockholders 0.030 0.098 <td>0.031 D&B credit score = high risk 0.059 ** Construction industry 0.019 Total employees 0.000 Manufacturing industry 0.057 ** Percent of business owned by principal 0.000 Transportation, communications -0.032 Family-owned business -0.023 and utilities industry 0.033 Firm purchased 0.002 Finance, insurance and 0.026 Firm inherited -0.036 ** real estate industries -0.017 Firm age -0.001 ** Engineering industry -0.030 * Firm has checking account -0.147 * Other industry Firm has savings account -0.025 ** Herfindahl index = .10 to .18 Firm has line of credit -0.085 ** Herfindahl index = .18 or above -0.001 Existing capital leases -0.006 Located in MSA 0.002 ** Existing mortgage for business 0.021 Sales market local only -0.010 Existing equipment loans -0.012 Capital lease application -0.003 Existing equipment loans -0.012 Capital lease application -0.004 Existing loans from stockholders 0.021 Business mortgage application -0.005 * Existing loans from stockholders 0.021 Business mortgage application -0.098 * Firm used trade credit in past year 0.000 Equipment loan application -0.001 Log of total sales in prior year -0.012 Log of total sasets -0.001 Log of total equity -0.001 -0.002 Negative total equity -0.001 -0.003 Firm bankruptcy in past 7 years -0.026</td>	0.031 D&B credit score = high risk 0.059 ** Construction industry 0.019 Total employees 0.000 Manufacturing industry 0.057 ** Percent of business owned by principal 0.000 Transportation, communications -0.032 Family-owned business -0.023 and utilities industry 0.033 Firm purchased 0.002 Finance, insurance and 0.026 Firm inherited -0.036 ** real estate industries -0.017 Firm age -0.001 ** Engineering industry -0.030 * Firm has checking account -0.147 * Other industry Firm has savings account -0.025 ** Herfindahl index = .10 to .18 Firm has line of credit -0.085 ** Herfindahl index = .18 or above -0.001 Existing capital leases -0.006 Located in MSA 0.002 ** Existing mortgage for business 0.021 Sales market local only -0.010 Existing equipment loans -0.012 Capital lease application -0.003 Existing equipment loans -0.012 Capital lease application -0.004 Existing loans from stockholders 0.021 Business mortgage application -0.005 * Existing loans from stockholders 0.021 Business mortgage application -0.098 * Firm used trade credit in past year 0.000 Equipment loan application -0.001 Log of total sales in prior year -0.012 Log of total sasets -0.001 Log of total equity -0.001 -0.002 Negative total equity -0.001 -0.003 Firm bankruptcy in past 7 years -0.026

Note:

For ease of interpretation the marginal effects of the probit coefficients are displayed in the figure. Significance is calculated using t-statistics from the probit coefficients associated with the marginal effects.

Source: BBC Research & Consulting analysis of 2003 SSBF data.

^{*} Statistically significant at 90% confidence level.

^{**} Statistically significant at 95% confidence level.

[&]quot;Less than high school education," "Negative sales in prior year" and "Mining industry" perfectly predicted loan outcome and dropped out of the regression; "Owner has negative net worth" and "Negative total assets" dropped because of colinearity.

- Location in the Pacific region is associated with a higher likelihood of loan denial;
- Owner experience is associated with a higher likelihood of loan denial;
- Having an advanced degree is associated with a lower probability of loan denial;
- Being a business owner who filed for bankruptcy in the past seven years is associated with a higher likelihood of loan denial;
- Being a business with an average or high-risk credit score is associated with a higher probability of loan denial;
- Being an inherited businesses or older businesses is associated with a lower likelihood of loan denial;
- Having an existing line of credit, checking account, or savings account is associated with a lower likelihood of loan denial;
- Having existing loans (other than mortgage, vehicle, equipment or stockholder loans) is associated with a higher likelihood of loan denial;
- Higher total sales in the prior year is associated with a lower probability of being denied loans;
- Being an S or C corporation is associated with a higher probability of being denied loans;
- Being in the transportation, communications and utilities industry is associated with a higher likelihood of being denied loans;
- Location in metropolitan areas is associated with a higher probability of loan denial; and
- Applying for business mortgages, vehicle loans, and loans for "other" purposes is associated with a greater likelihood of loan denial.

After statistically controlling for race- and gender-neutral influences, the study team observed that businesses owned by African Americans were more likely to have their loans denied than other businesses. Figure G-10 also indicates that although there is little or no overall influence of business owner gender on rates of loan denial, female business owners in the Pacific region appear to have a lower likelihood of loan denial than female business owners nationally.

The study team also simulated approval rates from the 2003 SSBF results using the same approach as it used for the 1998 results. Figure G-11 presents actual and simulated ("benchmark") approval rates for African American-owned businesses, the sole minority group with statistically significant disparities in loan approval in the 2003 data. Simulated approval rates indicated that African American-owned businesses are approved at 71 percent of the rate observed for similarly-situated non-Hispanic white male-owned businesses (i.e., non-Hispanic white male-owned businesses with the same demographic, credit and financial health, lender environment, and loan characteristics of African American-owned businesses).

Figure G-11.
Comparison of actual loan approval rates to simulated loan approval rates, 2003

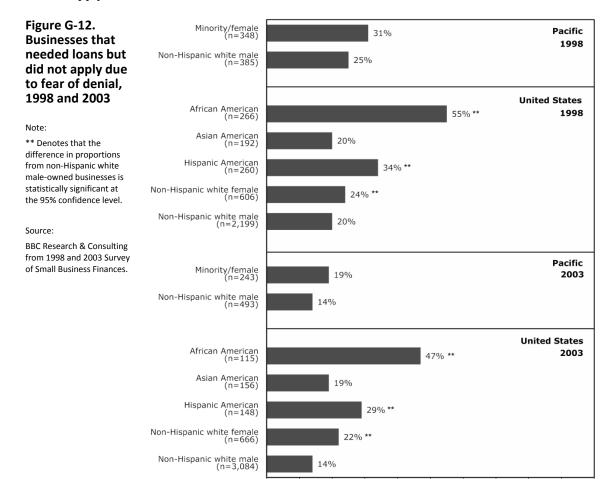
	Loan approval rates		Disparity index	
Group	Actual	Benchmark	(100 = parity)	
African American	49.1%	69.0%	71	

Note: Actual approval rates presented here and denial rates in Figure G-7 do not sum to 100% because some observations were excluded from the probit regression.

"Loan approval" means that a business owner always or at least sometimes had his or her business loan applications approved over the previous three years.

Source: BBC Research & Consulting analysis of 2003 NSSBF data.

Applying for loans. Fear of loan denial can be a barrier to business credit in the same way that actual loan denial presents a barrier. The SSBF includes a question that gauges whether a business owner did not apply for a loan due to fear of loan denial. Using data from the 1998 and 2003 SSBF, Figure G-12 presents the percentage of businesses that reported needing credit but did not apply for loans because of fears of denial.



10%

20%

30%

40%

50%

60%

70%

80%

90%

100%

In 1998 and 2003, African American- and Hispanic American-owned businesses were more likely than non-Hispanic white male-owned businesses in the nation to forgo applying for loans due to a fear of denial. Non-Hispanic white women-owned businesses were also more likely to forgo applying for loans due to a fear of denial. In the Pacific region in both 1998 and 2003, fear of denial was greater for minority- and women-owned businesses than for non-Hispanic white male-owned businesses but those differences were not statistically significant.

Other researchers' regression analyses of fear of denial. Other studies have identified factors that influence the decision to apply for a loan, such as business size, business age, owner age, and educational attainment. Accounting for those factors can help in determining whether race/ethnicity or gender of business owners explains whether owners did not apply for a loan due to fear of loan denial. Results indicate that:

- African American and Hispanic American business owners are significantly less likely to apply for loans due to fear of denial.⁷⁰
- After statistically controlling for educational attainment, there were no differences in loan application rates between non-Hispanic white, African American, Hispanic American, and Asian American male business owners.⁷¹
- African American-owned businesses were more likely than other businesses to report being seriously concerned with credit markets and were less likely to apply for credit in fear of loan denial.⁷²
- In its study for the Santa Clara Valley Transportation Authority (located in the Pacific Region), CRA used an econometric model to investigate businesses that did not apply for loans for fear of denial. The model explored whether differences between race/ethnicity and gender groups exist after statistically controlling for other factors. CRA based its analysis on combined data from the 1998 and 2003 SSBFs. Results from CRA's model indicate that African American- and Hispanic American-owned businesses are more likely to not apply for loans out of fear of being denied. In addition, results for businesses located in the Pacific region did not differ significantly from national results.⁷³

BBC regression model for fear of denial in the SSBF. The BBC study team conducted its own econometric analysis of fear of denial by developing a model to explore the relationships between fear of denial and the race/ethnicity and gender of businesses owners while statistically controlling for other factors. The model was similar to the probit regression for likelihood of denial except that the fear of denial model included business owners who did not apply for a loan and excluded loan characteristics.

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⁷⁰ Cavalluzzo, 2002. "Competition, Small Business Financing and Discrimination: Evidence from a New Survey."

⁷¹ 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.

⁷² Blanchflower et al., 2003. Discrimination in the Small Business Credit Market.

⁷³ CRA International. 2007. "Measuring Minority- and Woman-Owned Construction and Professional Service Firm Availability and Utilization. *Prepared for Santa Clara Valley Transportation Authority.*

After excluding a small number of observations where fear of denial was imputed, the 1998 national sample included 3,457 businesses and the Pacific region included 715 such businesses. The 2003 national sample included 4,231 businesses and the Pacific region included 736 such businesses. In both 1998 and 2003, Pacific region effects are modeled using regional control variables in the national model.⁷⁴

1998 SSBF regression results. Figure G-13 presents the marginal effects from the probit regression model predicting the likelihood that a business needs credit but will not apply for loans due to fear of loan denial. The results from the model indicate that a number of race- and gender-neutral factors significantly affect the probability of forgoing application for a loan due to fear of denial. Factors that are associated with a *greater* likelihood of not applying for a loan due to fear of loan denial include:

- The business owner or business filing for bankruptcy in the past seven years or having had a judgment against the business;
- The business having an average, significant, or high-risk credit score;
- The business having an existing mortgage, existing vehicle loans, existing loans from stockholders, or other existing loans;
- Higher total assets for the business; and
- The business being delinquent in business transactions or filing for bankruptcy in the past seven years.

Factors that are associated with a *lower* likelihood of not applying for a loan due to fear of loan denial include:

- More equity in the business owner's home if he or she is a homeowner and more business owner net worth;
- If the business was acquired through a purchase;
- Having an older business;
- Having a savings account or a line of credit; and
- More sales in the prior year (but also negative sales in the prior year).

After statistically controlling for race- and gender-neutral influences, the study team observed that African American-owned businesses were more likely to forgo applying for loans due to fear of denial. Overall, fear of denial tends to be higher in the Pacific region. However, both African American- and Asian American-owned businesses in the Pacific region were less likely to fear loan denial than African American- and Asian American-owned businesses nationwide.

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 $^{^{74}}$ Again, the study team considered an interaction variable to represent firms that are both minority and female but the term was not significant in 1998 or 2003.

Figure G-13. Likelihood of forgoing a loan application due to fear of denial (probit regression) in the U.S. in the 1998 SSBF, Dependent variable: needed a loan but did not apply due to fear of denial

Variable	Marginal Effect	Variable	Marginal Effect	Variable	Marginal Effect
Race/ethnicity and gender		Firm's characteristics, credit and financial health		Firm and lender environment and loan of	characteristics
African American	0.294 **	D&B credit score = moderate risk	0.079	Partnership	-0.008
Asian American	0.049	D&B credit score = average risk	0.103 **	S corporation	0.001
Hispanic American	0.025	D&B credit score = significant risk	0.163 **	C corporation	0.036
Native American	0.069	D&B credit score = high risk	0.209 **	Mining industry	-0.078
Female	0.006	Total employees	-0.001	Construction industry	-0.034
Pacific region	0.074 **	Percent of business owned by principal	0.000	Manufacturing industry	-0.006
African American in Pacific region	-0.110 *	Family-owned business	0.022	Transportation, communications	
Asian American in Pacific region	-0.099 *	Firm purchased	-0.070 **	and utilities industry	0.048
Hispanic American in Pacific region	0.034	Firm inherited	0.003	Finance, insurance and	
Native American in Pacific region	-0.025	Firm age	-0.003 **	real estate industries	-0.031
Female in Pacific region	0.066	Firm has checking account	0.050	Engineering industry	-0.001
		Firm has savings account	-0.056 **	Other industry	-0.034
Owner's characteristics, credit and resources		Firm has line of credit	-0.062 **	Herfindahl index = .10 to .18	0.000
Age	-0.001	Existing capital leases	0.037	Herfindahl index = .18 or above	0.011
Owner experience	0.001	Existing mortgage for business	0.105 **	Located in MSA	0.031
Less than high school education	0.088	Existing vehicle loans	0.049 **	Sales market local only	-0.017
Some college	-0.003	Existing equipment loans	0.034		
Four-year degree	-0.014	Existing loans from stockholders	0.097 **		
Advanced degree	-0.029	Other existing loans	0.067 **		
Log of home equity	-0.007 **	Firm used trade credit in past year	0.016		
Bankruptcy in past 7 years	0.324 **	Log of total sales in prior year	-0.022 **		
Judgement against in past 3 years	0.093 **	Negative sales in prior year	-0.167 **		
Log of net worth excluding home	-0.034 **	Log of cost of doing business in prior year	-0.002		
Owner has negative net worth	-0.168	Log of total assets	0.020 **		
		Negative total assets	0.115		
		Log of total equity	-0.009		
		Negative total equity	0.010		
		Firm bankruptcy in past 7 years	0.567 **		
		Firm delinguency in business transactions	0.237 **		

For ease of interpretation the marginal effects of the probit coefficients are displayed in the figure. Significance is calculated using t-statistics from the probit coefficients associated with the marginal effects.

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

^{*} Statistically significant at 90% confidence level.

^{**} Statistically significant at 95% confidence level.

2003 SSBF regression results. Figure G-14 presents the marginal effects from the probit model predicting the likelihood that a business needs credit but will not apply for a loan due to fear of denial. The results from the model indicate that a number of race- and gender-neutral factors significantly affect the probability of forgoing application for a loan due to fear of denial. Factors that are associated with a *greater* likelihood of not applying for a loan due to fear of loan denial include:

- The business having a significant or high risk credit score;
- A larger percentage of business owned by the principal owner;
- The business having an existing mortgage, existing vehicle or equipment loans, existing loans from stockholders or other existing loans;
- Higher cost of doing business in the prior year;
- Having been delinquent in business transactions or filing for bankruptcy (business owner or business) in the past seven years; and
- Location in a metropolitan area.

Factors that are associated with a *lower* likelihood of not applying for a loan due to fear of loan denial include:

- The business owner being older and having a four-year college degree;
- More equity in the business owner's home if he or she is a homeowner and more business owner net worth;
- Being an older business;
- More sales in the prior year (but also negative sales in the prior year); and
- Having a local (as opposed to regional, national or international) sales market.

After statistically controlling for race- and gender-neutral influences, the study team observed that African American- and Hispanic American-owned businesses were more likely to forgo applying for a loan due to fear of denial (similar to CRA's analysis). In addition, BBC's model indicates that women-owned businesses were also more likely to need a loan but choose not to apply due to fear of denial. Although not found nationally, in the Pacific region, Native American-owned businesses were more likely to fear denial than other businesses.

Figure G-14.
Likelihood of forgoing a loan application due to fear of denial (probit regression) in the U.S. in the 2003 SSBF,
Dependent variable: needed a loan but did not apply due to fear of denial

Variable	Marginal Effect	Variable	Marginal Effect	Variable	Marginal Effect
Race/ethnicity and gender		Firm's characteristics, credit and financial health		Firm and lender environment and loan of	haracteristics
African American	0.214 **	D&B credit score = moderate risk	-0.011	Partnership	0.004
Asian American	0.049	D&B credit score = average risk	0.040	S corporation	0.014
Hispanic American	0.071 *	D&B credit score = significant risk	0.046 *	C corporation	0.020
Native American or other minority	-0.026	D&B credit score = high risk	0.104 **	Construction industry	0.033
Female	0.046 **	Total employees	0.000	Manufacturing industry	-0.012
Pacific region	0.037	Percent of business owned by principal	0.001 **	Transportation, communications	
African American in Pacific region	-0.081	Family-owned business	-0.009	and utilities industry	-0.049
Asian American in Pacific region	0.000	Firm purchased	-0.010	Finance, insurance and	
Hispanic American in Pacific region	-0.047	Firm inherited	-0.033	real estate industries	0.041
Native American or other minority in Pacific region	0.424 **	Firm age	-0.003 **	Engineering industry	-0.028
Female in Pacific region	-0.051	Firm has checking account	0.010	Other industry	0.010
		Firm has savings account	0.010	Herfindahl index = .10 to .18	-0.005
Owner's characteristics, credit and resources		Firm has line of credit	-0.005	Herfindahl index = .18 or above	0.024
Age	-0.002 **	Existing capital leases	0.030	Located in MSA	0.047 **
Owner experience	0.002	Existing mortgage for business	0.050 **	Sales market local only	-0.063 **
Less than high school education	0.041	Existing vehicle loans	0.031 *		
Some college	0.002	Existing equipment loans	0.043 *		
Four-year degree	-0.036 *	Existing loans from stockholders	0.074 **		
Advanced degree	-0.021	Other existing loans	0.106 **		
Log of home equity	-0.004 **	Firm used trade credit in past year	0.018		
Bankruptcy in past 7 years	0.227 **	Log of total sales in prior year	-0.022 **		
Judgement against in past 3 years	0.256 **	Negative sales in prior year	-0.092 *		
Log of net worth excluding home	-0.025 **	Log of cost of doing business in prior year	0.012 *		
		Log of total assets	0.005		
		Log of total equity	-0.008		
		Negative total equity	-0.033		
		Firm bankruptcy in past 7 years	0.210 **		
		Firm delinquency in business transactions	0.142 **		

Note:

For ease of interpretation the marginal effects of the probit coefficients are displayed in the figure. Significance is calculated using t-statistics from the probit coefficients associated with the marginal effects.

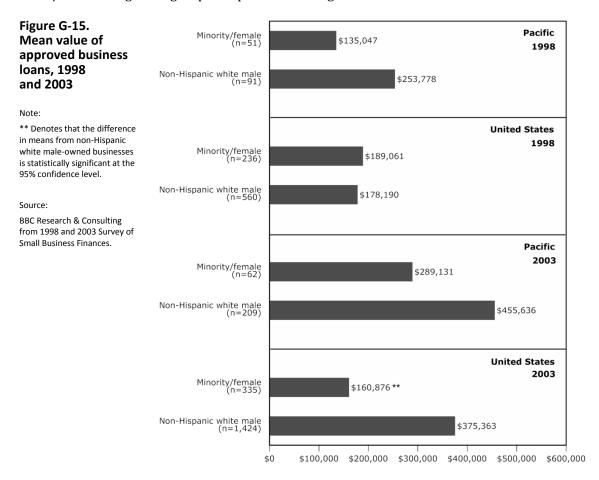
"Mining industry" perfectly predicted loan outcome and dropped out of the regression; "Owner has negative net worth" and "Negative total assets" dropped because of colinearity.

Source: BBC Research & Consulting analysis of 2003 SSBF data.

^{*} Statistically significant at 90% confidence level.

^{**} Statistically significant at 95% confidence level.

Loan values. The study team also considered average loan values for businesses that received loans. Results from the 1998 and 2003 SSBFs for mean loan values issued to different racial/ethnic and gender groups are presented in Figure G-15.



Comparisons of loan amounts between non-Hispanic white male-owned businesses and minority- and women-owned businesses indicated the following:

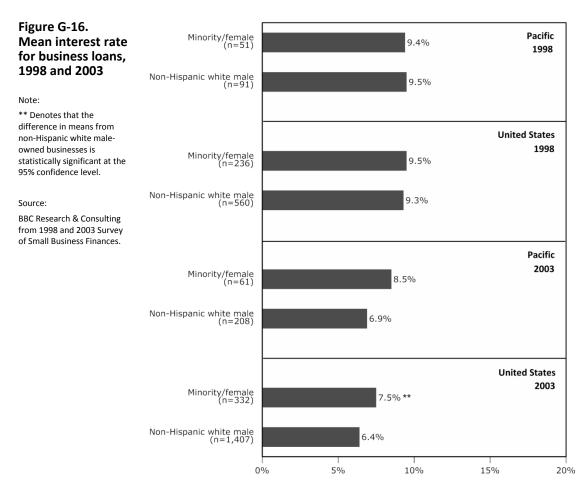
- In both 1998 and 2003, minority- and women-owned businesses in the Pacific region were issued loans that were worth less, on average, than loans issued to non-Hispanic white maleowned businesses.
- In 2003, national results showed that minority- and women-owned businesses were issued loans that were worth, on average, less than half of the loan amount issued to non-Hispanic white male-owned businesses. However, national 1998 data suggest that minority- and women-owned businesses were issued loans that were worth slightly more, on average, than loans issued to non-Hispanic white male-owned businesses.

Previous national studies have found that African American-owned businesses are issued loans that are worth less than loans issued to non-Hispanic white-owned businesses with similar characteristics. Examinations of construction companies in the United States have also revealed

that African American-owned businesses are issued loans that are worth less than loans issued to businesses with otherwise identical characteristics.⁷⁵

The BBC study team conducted its own econometric analysis to explore the relationships between loan amounts and the race/ethnicity and gender of business owners while statistically controlling for other factors. That regression model did not indicate that the loan amounts approved for minorities or women were significantly different than those approved for non-Hispanic whites or men.

Interest rates. Based on 1998 and 2003 SSBF data, Figure G-16 presents the average interest rates on commercial loans by the race/ethnicity of business owners. In 1998, on average, minority- and women-owned businesses in the Pacific region were issued loans with similar interest rates to loans issued to non-Hispanic white male-owned businesses. However, in 2003, the average interest rate on loans issued to minority- and women-owned businesses appeared to be higher (by 1.6 percentage points) than the mean interest rate of loans for non-Hispanic white male-owned businesses.



The overall pattern in the Pacific region for loan interest rates was similar to that found in the United States in 1998 and 2003.

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⁷⁵ Grown. 1991. "Commercial Bank Lending Practices and the Development of Black-Owned Construction Companies."

Other researchers' regression analyses of interest rates. Previous studies have investigated differences in interest rates across race/ethnicity and gender while statistically controlling for factors such as individual credit history, business credit history, and Dun and Bradstreet credit scores. Findings from those studies include the following:

- Hispanic American-owned businesses had significantly higher interest rates for lines of credit in places with less credit market competition. However, the study found no evidence that African American- or female-owned businesses received higher rates.⁷⁶
- Among a sample of businesses with no past credit problems, African American-owned businesses had significantly higher interest rates on approved loans than other groups.
- In its study for the Santa Clara Valley Transportation Authority, CRA also investigated differences in interest rates by race/ethnicity and gender using a linear econometric model that accounted for other factors that may impact interest rates. The CRA study indicated that, on a national level, African American- and Hispanic American-owned businesses pay a higher interest rate for loans than non-Hispanic white-owned businesses after statistically controlling for other factors. CRA did not find any additional differences between minority-and non-minority-owned businesses located in the Pacific region.⁷⁸

BBC regression model for interest rates in the SSBF. The 2003 SSBF data for the Pacific region indicate higher interest rates, on average, for minority- and women-owned businesses compared with white male-owned businesses. The BBC study team conducted a regression analysis of interest rates using data from both the 1998 and the 2003 SSBFs in order to explore the relationships between interest rates and the race/ethnicity and gender of business owners while statistically controlling for other factors. BBC developed a linear regression model using the same control variables as the likelihood of denial model along with additional characteristics of the loan received, such as whether the loan was guaranteed, if collateral was required, the length of the loan, and whether the interest rate was fixed or variable.

After excluding a small number of observations where the interest rate was imputed, the 1998 national sample included 719 businesses that received a loan in the past three years and the Pacific region included 125 such businesses. The 2003 national sample included 1,606 businesses that received a loan in the past three years and the Pacific region included 247 such businesses. Again, Pacific region effects were modeled using regional control variables.⁷⁹

⁷⁶ Cavalluzzo. 2002. "Competition, Small Business Financing and Discrimination: Evidence from a New Survey."

 $^{^{77}}$ Blanchflower. 2003. "Discrimination in the Small Business Credit Market."

⁷⁸ CRA International. 2007. "Measuring Minority- and Woman-Owned Construction and Professional Service Firm Availability and Utilization. *Prepared for Santa Clara Valley Transportation Authority.*

 $^{^{79}}$ BBC considered an interaction variable to represent businesses that are both minority- and female-owned but the term was not significant in 1998 or 2003.

1998 SSBF regression results. Figure G-17 presents the coefficients from the 1998 linear model. The results from the regression model indicate that a number of race- and genderneutral factors significantly affect interest rates, including the following factors:

- Being a business owner with less than a high school education is associated with higher interest rates;
- Being a business acquired through purchase is associated with lower interest rates;
- Having existing loans (other than vehicle or equipment loans or loans from stockholders) is associated with higher interest rates;
- More sales in the prior year (but also negative sales in the prior year) are associated with lower interest rates;
- An increase in a business' total equity is associated with lower interest rates as is having negative equity;
- Capital leases are associated with have higher interest rates; and
- Collateral requirements are associated with lower interest rates.

After statistically controlling for race- and gender-neutral influences, the study team did not observe any differences between minority- and female-owned businesses and non-Hispanic white-owned businesses in loan interest rates.

2003 SSBF regression results. Figure G-18 presents the coefficients from the 2003 linear model. The results from the regression model indicate that a number of race- and genderneutral factors significantly affect interest rates, including the following factors:

- Location in the Pacific region is associated with higher interest rates;
- The business owner having an advanced degree is associated with lower interest rates;
- The business owner's net worth is associated with a lower interest rate:
- High risk credit scores are associated with higher interest rates (by approximately 1 percentage point);
- An increase in a business' total equity is associated with higher interest rates as is having negative equity;
- Being in the construction industry is associated with lower interest rates but being in the transportation, communications, and utilities industry is associated with higher interest rates;
- Capital leases are associated with higher interest rates and vehicle loans are associated with lower interest rates;
- Collateral requirements are associated with lower interest rates;
- Longer loans are associated with lower interest rates; and
- Fixed rate loans are associated with higher interest rates than variable rate loans.

Figure G-17. Interest rate (linear regression) in the U.S. in the 1998 SSBF, Dependent variable: interest rate on most recent approved loan

Variable	Coefficient	Variable	Coefficient	Variable	Coefficient
Race/ethnicity and gender		Firm's characteristics, credit and financial health		Firm and lender environment and loan cl	haracteristics
Constant	14.625 **	D&B credit score = moderate risk	-0.270	Partnership	0.060
African American	1.464	D&B credit score = average risk	-0.161	S corporation	0.246
Asian American	1.258	D&B credit score = significant risk	-0.145	C corporation	0.225
Hispanic American	-0.303	D&B credit score = high risk	0.502	Mining industry	-0.079
Native American	-0.609	Total employees	0.002	Construction industry	-0.064
Female	-0.304	Percent of business owned by principal	0.005	Manufacturing industry	-0.020
Pacific region	-0.093	Family-owned business	0.305	Transportation, communications	
African American in Pacific region	-2.668	Firm purchased	-0.404 *	and utilities industry	0.131
Asian American in Pacific region	-2.001	Firm inherited	-0.052	Finance, insurance and	
Hispanic American in Pacific region	0.141	Firm age	-0.001	real estate industries	-0.528
Female in Pacific region	0.515	Firm has checking account	0.080	Engineering industry	-0.134
		Firm has savings account	0.359	Other industry	-0.423
		Firm has line of credit	-0.315	Herfindahl index = .10 to .18	-0.099
Owner's characteristics, credit and resources		Existing capital leases	0.112	Herfindahl index = .18 or above	0.229
Age	0.001	Existing mortgage for business	0.044	Located in MSA	-0.060
Owner experience	-0.014	Existing vehicle loans	-0.138	Sales market local only	-0.165
Less than high school education	1.192 **	Existing equipment loans	-0.080	Approved Loan amount	0.000
Some college	-0.182	Existing loans from stockholders	0.234	Capital lease application	1.267 **
Four-year degree	0.154	Other existing loans	0.601 **	Business mortgage application	-0.272
Advanced degree	0.059	Firm used trade credit in past year	-0.200	Vehicle loan application	-0.478
Log of home equity	-0.049	Log of total sales in prior year	-0.206 *	Equipment loan application	-0.068
Bankruptcy in past 7 years	0.985	Negative sales in prior year	-3.222 **	Loan for other purposes	-0.452
Judgement against in past 3 years	0.330	Log of cost of doing business in prior year	0.019	Loan guaranteed	0.071
Log of net worth excluding home	-0.049	Log of total assets	0.027	Collateral required	-0.388 *
Owner has negative net worth	0.058	Negative total assets	1.990	Length of loan (months)	-0.002
		Log of total equity	-0.173 **	Fixed rate	0.037
		Negative total equity	-2.236 **		
		Firm bankruptcy in past 7 years	-0.597		
		Firm delinquency in business transactions	0.430		

* Statistically significant at 90% confidence level.

** Statistically significant at 95% confidence level.

Coefficients are presented in percentage form.

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

Figure G-18.
Interest rate (linear regression) in the U.S. in the 2003 SSBF,
Dependent variable: interest rate on most recent approved loan

Variable	Coefficient	Variable	Coefficient	Variable	Coefficient
Race/ethnicity and gender		Firm's characteristics, credit and financial health		Firm and lender environment and loan cl	naracteristics
Constant	11.993 **	D&B credit score = moderate risk	0.241	Partnership	-0.510
African American	1.787	D&B credit score = average risk	0.192	S corporation	-0.142
Asian American	0.119	D&B credit score = significant risk	0.279	C corporation	-0.113
Hispanic American	1.096 *	D&B credit score = high risk	1.013 **	Mining industry	0.228
Native American or other minority	-0.437	Total employees	-0.002	Construction industry	-0.555 *
Female	-0.212	Percent of business owned by principal	-0.001	Manufacturing industry	-0.235
Pacific region	1.224 **	Family-owned business	-0.516	Transportation, communications	
African American in Pacific region	2.906 *	Firm purchased	-0.001	and utilities industry	1.367 **
Asian American in Pacific region	0.235	Firm inherited	0.065	Finance, insurance and	
Hispanic American in Pacific region	-0.139	Firm age	-0.012	real estate industries	-0.036
Native American or other minority in Pacific region	-0.972	Firm has checking account	-0.354	Engineering industry	0.515
Female in Pacific region	0.403	Firm has savings account	-0.017	Other industry	0.372
		Firm has line of credit	-0.028	Herfindahl index = .10 to .18	0.550
Owner's characteristics, credit and resources		Existing capital leases	0.132	Herfindahl index = .18 or above	0.876
Age	-0.013	Existing mortgage for business	0.028	Located in MSA	0.111
Owner experience	0.011	Existing vehicle loans	0.344	Sales market local only	-0.148
Less than high school education	0.284	Existing equipment loans	0.563	Approved Loan amount	0.000
Some college	0.239	Existing loans from stockholders	0.191	Capital lease application	1.221 *
Four-year degree	-0.324	Other existing loans	0.380	Business mortgage application	0.547
Advanced degree	-0.572 *	Firm used trade credit in past year	0.252	Vehicle loan application	-1.062 **
Log of home equity	0.006	Log of total sales in prior year	-0.157	Equipment loan application	-0.261
Bankruptcy in past 7 years	0.241	Negative sales in prior year	-2.286	Loan for other purposes	-0.369
Judgement against in past 3 years	-0.205	Log of cost of doing business in prior year	-0.144	Loan guaranteed	-0.312
Log of net worth excluding home	-0.149 **	Log of total assets	-0.142	Collateral required	-0.842 **
		Log of total equity	0.182 *	Length of loan (months)	-0.004 **
		Negative total equity	2.132 *	Fixed rate	1.185 **
		Firm bankruptcy in past 7 years	-0.206		
		Firm delinquency in business transactions	-0.179		

Note: * Statistically significant at 90% confidence level.

Source: BBC Research & Consulting analysis of 2003 SSBF data.

^{**} Statistically significant at 95% confidence level.

[&]quot;Owner has negative net worth" and "Negative total assets" dropped out of the regression because of colinearity.

After statistically controlling for race- and gender-neutral influences, the study team observed that Hispanic American-owned businesses received loans with interest rates higher than non-Hispanic white-owned businesses (about 1 percentage point higher). African American-owned businesses in the Pacific region received loans with higher interest rates than other businesses.

Results from BBC availability interviews. As part of the 2012 availability interviews that the study team conducted, BBC asked several questions related to potential barriers or difficulties that businesses have faced in the local marketplace. The interviewer introduced those questions with the following description: "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 in Washington within the past five years as we ask you these questions."

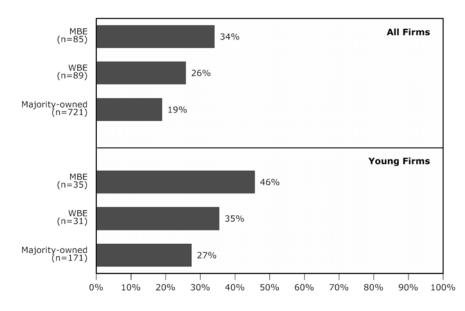
For each potential barrier, the study team examined whether the percentage of businesses that indicated that they had experienced that specific barrier or difficulty differed among minority-owned business enterprises (MBEs), non-Hispanic white women-owned business enterprises (WBEs), and majority-owned businesses (i.e., non-Hispanic white male-owned businesses). The study team also examined if affirmative responses differed for young businesses (i.e., businesses that were 10 years old or younger, which corresponded to the youngest quarter of businesses across all completed availability interviews).

Access to lines of credit and loans. The first question was, "Has your company experienced any difficulties in obtaining lines of credit or loans?" As shown in Figure G-19, of all businesses, 34 percent of MBEs and 26 percent of WBEs reported difficulties obtaining lines of credit or loans. A smaller percentage of majority-owned businesses (19%) reported that they had experienced difficulties with obtaining lines of credit or loans.

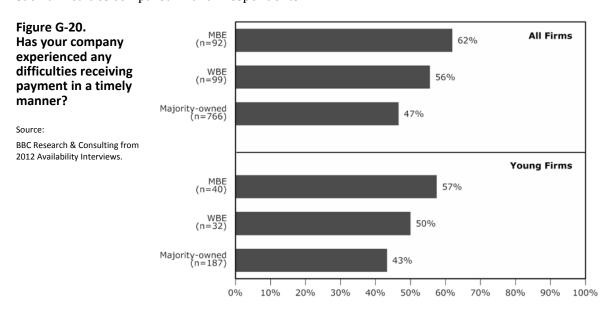
Overall, a larger percentage of young businesses reported that they had experienced difficulties with obtaining lines of credit or loans compared to all businesses. Again, young MBEs and WBEs were more likely to report such difficulties than young majority-owned businesses.

Figure G-19.
Has your company experienced any difficulties in obtaining lines of credit or loans?

Source:



Receiving timely payment. Need for business credit is, in part, linked to whether businesses are paid for their work in a timely manner. In the availability interviews, BBC asked, "Has your company had any difficulties receiving payment in a timely manner?" Figure G-20 shows that many MBEs, WBEs, and majority-owned businesses reported difficulties with receiving timely payment. Overall, MBE/WBEs were more likely to report difficulties receiving payment in a timely manner than majority-owned businesses. Young businesses were less likely to report such difficulties compared with all respondents.



Bonding and Insurance

Access to bonding is closely related to access to capital. Some national studies have identified barriers regarding MBE/WBEs and access to surety bonds for public construction projects.⁸⁰ High insurance requirements on public sector projects may also represent a barrier for certain construction and engineering firms attempting to do business with government agencies.

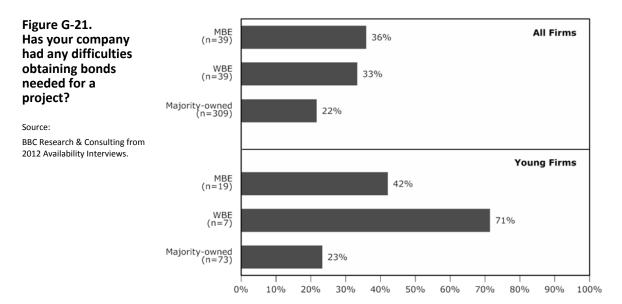
Bonding. To research whether bonding represented a barrier for Washington businesses, BBC asked firms completing availability interviews:

- Has your company obtained or tried to obtain a bond for a project?
- [and if so] Has your company had any difficulties obtaining bonds needed for a project?

Figure G-21 presents results from those questions. Among businesses that reported that they had obtained or tried to obtain a bond, 36 percent of MBEs and 33 percent of WBEs reported difficulties with obtaining bonds needed for a project. A smaller percentage of majority-owned businesses (22%) reported difficulties with obtaining bonds needed for a project.

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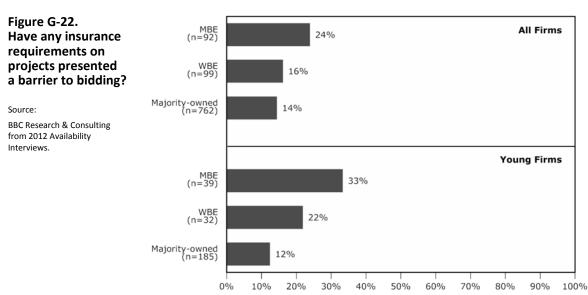
⁸⁰ For example, Enchautegui, Maria E. et al. 1997. "Do Minority-Owned Businesses Get a Fair Share of Government Contracts?" *The Urban Institute:* 1-117, p. 56.



Among young businesses, a larger percentage of MBEs (42%) than majority-owned businesses (23%) reported difficulties with obtaining bonds needed for a project. Compared to all WBEs, a substantially larger percentage of young WBEs (71%) reported difficulties with obtaining bonds, although those results were based on a relatively small number of young WBE respondents.

Insurance. BBC also examined whether MBEs and WBEs were more likely than majority-owned businesses to report that insurance requirements represented a barrier to bidding. Figure G-22 presents those results. About one-quarter of MBEs reported such difficulties. Compared to MBEs, a smaller percentage of WBEs (16%) and majority-owned businesses (14%) indicated that insurance requirements present a barrier to bidding on projects.

Young MBEs and WBEs were more likely than all MBE/WBEs to indicate that insurance requirements on a project present a barrier to bidding. Young majority-owned businesses were less likely to identify insurance requirements as a barrier than all majority-owned businesses.



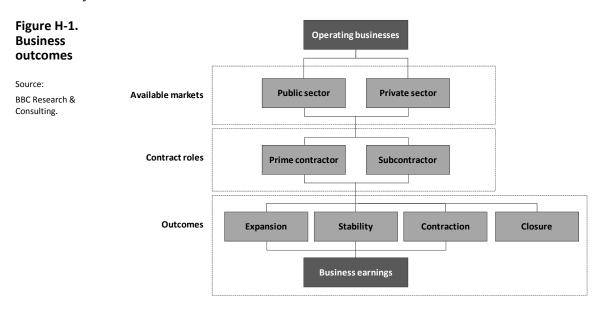
Summary

There is evidence that minorities and women continue to face certain disadvantages in accessing capital that is necessary to start, operate, and expand businesses. Capital is required to start companies, so barriers accessing capital can affect the number of minorities and women who are able to start businesses. In addition, minorities and women start business with less capital (based on national data). A number of studies have demonstrated that lower start-up capital adversely affects prospects for those businesses. Key results included the following:

- Home equity is an important source of funds for business start-up and growth. Fewer Hispanic Americans and Native Americans in Washington own homes compared with non-Hispanic whites. Hispanic Americans and Native Americans who do own homes tend to have lower home values.
- African Americans, Asian-Pacific Americans, and Subcontinent Asian Americans are also less likely to own homes in Washington compared with non-Hispanic whites. However, those who do own homes tend to have similar or higher home values.
- African Americans and Native Americans applying for home mortgages in Washington have been more likely than non-Hispanic whites to have their applications denied.
- African American, Hispanic American, and Native American mortgage borrowers in
 Washington have been more likely than non-Hispanic whites to be issued subprime loans.
- There is evidence that African American and Hispanic American business owners were more likely to have been denied business loan applications than similarly situated non-Hispanic whites. Results for the Pacific region appear consistent with national results.
- Among business owners who reported needing business loans, there is evidence that African Americans, Hispanic Americans, and women were more likely to forgo applying for loans due to fear of denial than similarly-situated non-minorities and men. Results for the Pacific region appear to be consistent with national results. In the Pacific region in 2003, Native American business owners were also more likely to forgo applying for loans due to fear of denial than other business owners.
- There is evidence for 2003 that Hispanic American business owners receiving business loans paid higher interests rates than similarly-situated non-minorities (with results for the Pacific region consistent with national results). In the Pacific region, it appeared that African American-owned businesses also paid higher interest rates than other businesses.
- MBEs and WBEs were more likely to report difficulties with obtaining lines of credit or loans than majority-owned businesses in the 2012 availability interviews with Washington transportation contracting businesses.
- MBEs, WBEs, and majority-owned businesses frequently reported difficulties with receiving timely payment.
- When asked whether their companies had any difficulties with obtaining bonds and whether insurance requirements on projects presented a barrier to bidding, more MBEs and WBEs said that they had experienced such difficulties than majority-owned businesses.

APPENDIX H. Success of Businesses in the Washington Construction and Engineering Industries

BBC examined the success of minority- and women-owned business enterprises (MBE/WBEs) in the Washington construction and engineering industries. The study team assessed whether business outcomes for MBE/WBEs differ from those of non-Hispanic white male-owned businesses (i.e., majority-owned businesses). Figure H-1 provides a framework for the study team's analyses.



BBC researched outcomes for MBE/WBEs and majority-owned businesses in terms of:

- Participation in public and private sector markets, including contractor roles and sizes of contracts bid on and performed;
- Business closures, expansions, and contractions; and
- Business receipts and earnings; and
- Potential barriers to starting or expanding businesses.

¹ The study team uses the terms "MBEs" and "WBEs" to refer to businesses that are owned and controlled by minorities or women (according to the race/ethnicity and gender definitions listed above), regardless of whether they are certified or meet the revenue and net worth requirements for DBE certification and regardless of whether they are certified as MBEs or WBEs through the Washington State Office of Minority and Women's Business Enterprises.

Participation in Public and Private Sector Markets

BBC drew on information that the study team collected as part of the availability analysis to examine business outcomes for MBE/WBEs and majority-owned businesses in Washington, including information about:

- Whether businesses have been successful in the private sector, public sectors, or both;
- Whether businesses have bid on and won contracts in study industries and the sizes of those contracts; and
- Whether businesses have worked as prime contractors, subcontractors, or both.

Public sector versus private sector work. BBC examined whether minority- and womenowned transportation contracting businesses were any more or less likely to work in the private sector than the public sector. The study team separately examined responses for businesses working in the construction and engineering industries.^{2,3}

Construction. Figure H-2 presents the distribution of majority-, minority-, and women-owned businesses that reported bidding on government and private sector prime contracts and subcontracts, based on availability interview responses.

- Of the 285 construction businesses that reported bidding on public sector prime contracts in the past five years, 81 percent were majority-owned, 8 percent were MBEs, and 11 percent were WBEs.
- Of the 339 construction businesses that reported bidding on private sector prime contracts in the past five years, 82 percent were majority-owned, 7 percent were MBEs, and 10 percent were WBEs.
- The percentage of MBE/WBEs that reported bidding as subcontractors was slightly higher than the percentage of MBE/WBEs that reported bidding as prime contractors. The study team observed that result for both public and private sector work.
- The percentage of MBE/WBEs bidding as prime contractors was slightly higher for public sector work (19%) than for private sector work (17%).

The study team also asked construction businesses if they had worked on any public sector contracts (including both prime contracts and subcontracts). When asked to consider the past five years, about 78 percent of MBE construction businesses reported that they had been successful in obtaining public sector work. A similar percentage of WBEs (77%) said that they had obtained public sector work. Compared to MBE/WBEs, a larger percentage of majority-

² The study team deemed a business to have performed or bid on public sector work if it answered "yes" to either of the following questions in availability interviews: (a) "During the past five years, has your company submitted a bid or a price quote for any part of a contract for a state or local government agency in Washington?"; or (b) "During the past five years, has your company worked on any part of a contract for a state or local government agency in Washington?"

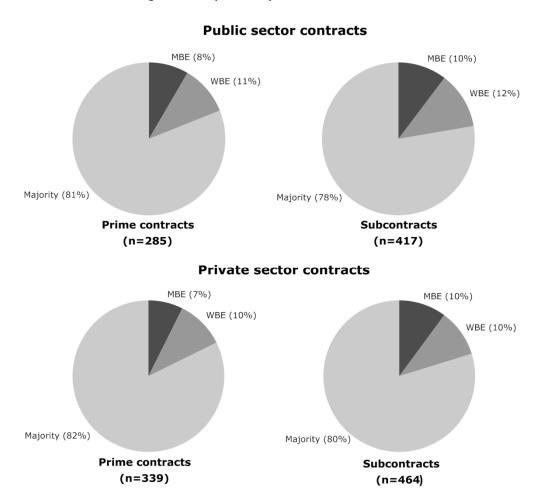
³ The study team deemed a business to have performed or bid on private sector work if it answered "yes" to either of the following questions in availability interviews: (a) "During the past five years, has your company submitted a bid or a price quote for any part of a contract for a private sector organization in Washington?"; or (b) "During the past five years, has your company worked on any part of a contract for a private sector organization in Washington?"

owned construction businesses (81%) reported that they bid had been successful in obtaining public sector work.

Overall, all businesses were more successful obtaining construction work in the private sector than in the public sector. About 94 percent of MBEs and nearly all WBEs (98%) reported that they had been successful in obtaining private sector work in the past five years. About 95 percent of majority-owned businesses reported that they had been successful in obtaining work in the private sector.

Figure H-2.

MBEs, WBEs and majority-owned construction businesses bidding on public sector and private sector work in Washington in the past five years



Note: "WBE" represents white women-owned firms.

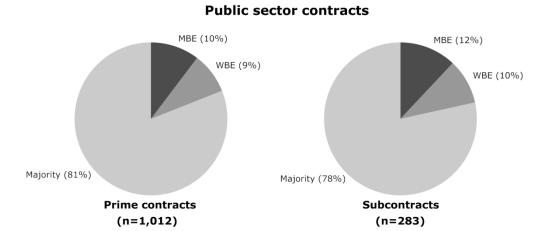
Total may not add to 100 percent due to rounding.

Source: BBC Research & Consulting from 2012 Availability Interviews.

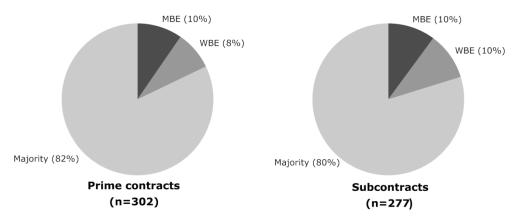
Engineering. The study team also analyzed the representation of MBE/WBEs among all businesses bidding on public and private sector engineering prime contracts and subcontracts. Figure H-3 presents the distribution of majority-, minority-, and women-owned engineering businesses that reported bidding on public and private sector prime contracts and subcontracts.

Figure H-3.

MBEs, WBEs and majority-owned engineering businesses bidding on public sector and private sector work in Washington in the past five years



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 2012 Availability Interviews.

The results for engineering businesses were similar to those for construction businesses. MBE/WBEs represented about 19 percent of businesses that reported bidding on public sector prime contracts and 18 percent of businesses that reported bidding on private sector prime contracts. A slightly larger percentage of MBE/WBEs reported bidding on subcontracts than on prime contracts.

The study team also asked engineering businesses if they had received any engineering work in the past five years. Compared to WBEs, MBEs and majority- owned businesses were more successful in obtaining private sector work. About 77 percent of WBEs said that they had worked on a public sector engineering contract in the past five years. About 91 percent of MBEs and majority-owned engineering businesses said that they had received public sector engineering work in the past five years.

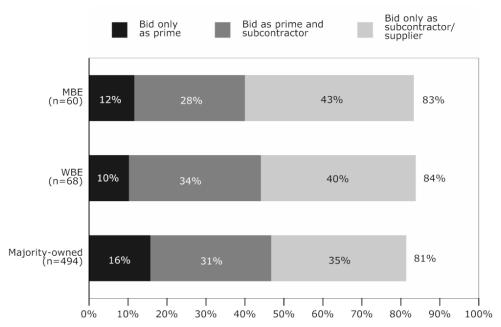
Overall, all businesses were more successful in obtaining private sector engineering work than public sector engineering work, but WBEs were slightly less successful in doing so that MBEs and majority-owned businesses. About 94 percent of WBEs said that they had worked on a private sector contract in the past five years. Nearly all MBEs (99%) and 96 percent of majority-owned businesses said that they had been successful in obtaining private sector work in the past five years.

Bidding as prime contractors and subcontractors/suppliers. BBC further examined the percentage of MBEs, WBEs, and majority-owned businesses that bid on public and private sector work in different roles (i.e., as prime contractors, subcontractors, or both). Those results pertain to bidding within the Washington transportation contracting industry within the past five years.

Construction. Figure H-4 presents the percentage of majority-, minority, and women-owned construction businesses that reported bidding on public sector work as a prime contractor, a subcontractor, or as both.

Figure H-4.

Percent of construction businesses that reported submitting a bid for any part of a public sector project in Washington in the past five years



Note: "WBE" represents white women-owned firms.

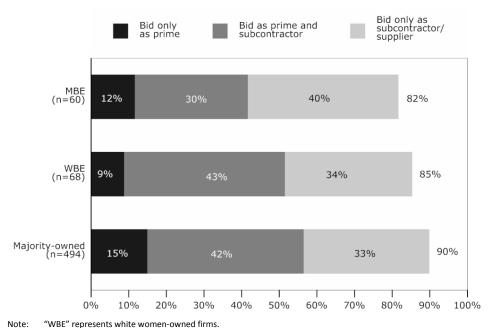
- Of MBE construction businesses that reported being qualified and interested in future transportation work, 83 percent said that they had bid on public sector work as a prime contractor or as a subcontractor in the past five years (including submitting price quotes). About 12 percent bid only as a prime contractor and 43 percent bid only as a subcontractor.
- A similar percentage of WBEs that reported being qualified and interested in future transportation work (84%) reported bidding on public sector work in the past five years. About 10 percent had bid only as a prime contractor and 40 percent bid only as a subcontractor.

A slightly smaller percentage of majority-owned construction businesses that reported being qualified and interested in future transportation work (81%) reported that they had bid on public sector work in the past five years. Compared to MBE/WBEs, a larger percentage of majority-owned businesses (16%) reported bidding only as a prime contractor. About 35 percent of majority-owned businesses reported that they had bid only as a subcontractor.

The study team also asked business owners and managers if their businesses had bid on a private sector construction project in the past five years. Figure H-5 presents the percentage of minority-, women-, and majority-owned construction businesses that reported bidding on private sector work as a prime contractor, a subcontractor, or as both.

Figure H-5.

Percent of construction businesses that reported submitting a bid for any part of a private sector project in Washington in the past five years



- Of MBE construction businesses that reported being qualified and interested in future transportation work, 82 percent said that they had bid on private sector work as a prime contractor or as a subcontractor in the past five years. About 12 percent reported that they had bid only as a prime contractor and 40 percent reported that they had bid only as a subcontractor.
- Overall, a larger percentage of WBEs that reported being qualified and interested in future transportation work (85%) reported bidding on private sector construction work, but a smaller percentage of WBEs (9%) than MBEs reported bidding only as a prime contractor. About 34 percent of WBEs said that they had bid only as a subcontractor on private sector work in the past five years.

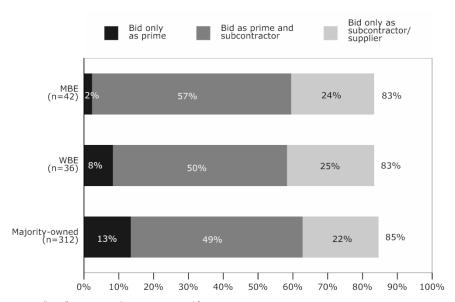
Nearly 90 percent of majority-owned construction businesses that reported being qualified and interested in future transportation work said that they had bid on private sector work in the past five years. Compared to MBE/WBEs, a larger percentage of majority-owned businesses (15%) reported that they had bid only as prime contractor. One-third of majority-owned businesses reported that they had bid only as a subcontractor.

Engineering. Figures H-6 and H-7 examine prime contract versus subcontract bidding for engineering businesses, based on data from the availability interviews.

Figure H-6 presents the percentage of majority-, minority-, and women-owned Washington engineering businesses that reported bidding on public sector work as a prime contractor, a subcontractor, or as both.

Figure H-6.

Percent of engineering businesses that reported submitting a bid for any part of a public sector project in Washington in the past five years



Note: "WBE" represents white women-owned firms.

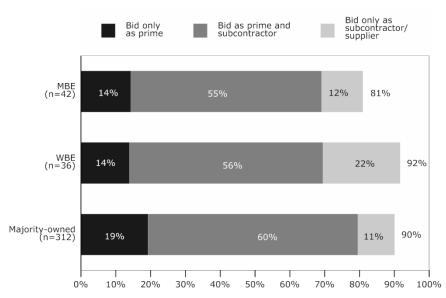
- Of MBE engineering businesses that reported being qualified and interested in future transportation work, 83 percent said that they had bid on public sector work as a prime contractor or as a subcontractor in the past five years (including submitting price quotes). Only two percent of MBEs reported that they had bid only as a prime contractor and 24 percent reported that they had bid only as a subcontractor.
- A similar percentage of WBEs that reported being qualified and interested in future transportation work (83%) reported bidding on public sector work in the past five years. About 8 percent reported that they had bid only as a prime contractor and 25 percent reported that they bid only as a subcontractor.
- A slightly larger percentage of majority-owned engineering businesses that reported being qualified and interested in future transportation work said that they had bid on public sector work in the past five years (85%). Compared to MBE/WBEs, a larger percentage of

majority-owned businesses (13%) reported bidding only as a prime contractor. About 22 percent of majority-owned firms reported that they had bid only as a subcontractor.

Figure H-7 presents the percentage of majority-, minority, and women-owned Washington engineering businesses that reported bidding on private sector work as a prime contractor, a subcontractor, or as both.

Figure H-7.

Percent of engineering businesses that reported submitting a bid for any part of a private sector project in the past five years



Note: "WBE" represents white women-owned firms.

- Of MBE engineering businesses that reported being qualified and interested in future transportation work, about 81 percent said that they had bid on private sector work as a prime contractor or as a subcontractor in the past five years. About 14 percent said that they had bid only as a prime contractor and 12 percent said that they had bid only as a subcontractor.
- Nearly 92 percent of WBEs that reported being qualified and interested in future transportation work said that they had bid on private sector engineering work in the past five years. Compared to MBEs, a similar percentage of WBEs (14%) reported bidding only as a prime contractor. About 22 percent of WBEs said that they had bid only as a subcontractor.
- About 90 percent of majority-owned engineering businesses that reported being qualified and interested in future transportation work said that they had bid on private sector work in the past five years. Compared to MBE/WBEs, a larger percentage of majority-owned businesses (19%) had bid only as a prime contractor. About 11 percent of majority-owned businesses had bid only as a subcontractor.

Largest contract in Washington in the past five years. As part of the availability interviews, the study team asked businesses to identify the largest contract they were awarded in Washington in the past five years.

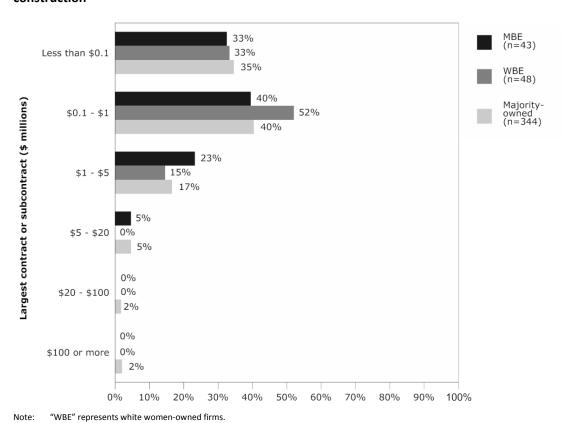
Construction. Among construction businesses, 85 percent of WBEs reported that the largest contract they received was worth less than \$1 million. A smaller percentage of MBEs (72%) and majority-owned businesses (75%) reported that the largest contract they received was worth less than \$1 million.

No WBEs working in construction said that the largest contract they had received in the past five years was worth more than \$5 million. In contrast, five percent of MBEs and eight percent of majority-owned construction businesses said that the largest contract they had received in the past five years was worth more than \$5 million.

No MBE/WBEs said that the largest contract they had received in the past five years was worth more than \$20 million. Two percent of majority-owned construction businesses said the largest contract they received in the past five years was worth between \$20 million and \$100 million, and an additional two percent said that the largest contract they received in the past five years was worth \$100 million or more.

Figure H-8.

Largest contract or subcontract that businesses received in Washington in the past five years, construction



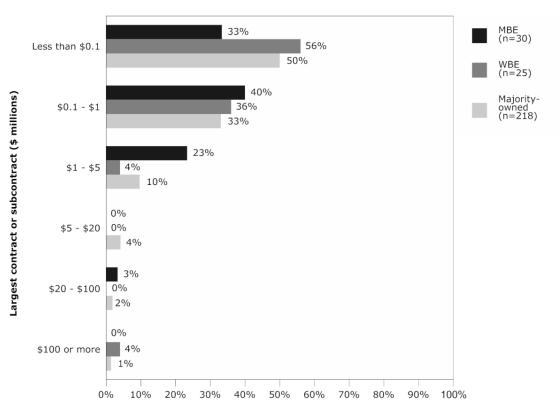
Engineering. Among engineering businesses, 92 percent of WBEs reported that the largest contract they had been awarded in the past five years was worth \$1 million or less. Compared to WBEs, a smaller percentage of MBEs (73%) and majority-owned businesses (83%) said that the largest contract that they had been awarded in the past five years was worth \$1 million or less.

Just three percent of MBEs and four percent of WBEs said that the largest contract they had been awarded in the past five years was worth \$5 million or more. About 7 percent of majority-owned businesses reported that the largest contract they had been awarded in the past five years was worth \$5 million or more.

No MBEs said that the largest contract they had been awarded in the past five years was worth \$100 million or more. Compared to MBEs, a larger percentage of WBEs (4%) and majority-owned engineering businesses (1%) said that the largest contract they have received in the past five years was worth \$100 million or more.

Figure H-9.

Largest contract or subcontract that the company received in Washington in the past five years, engineering



Note: "WBE" represents white women-owned firms.

Relative capacity. Some recent legal cases regarding race- and gender-conscious contracting programs have considered the importance of the "relative capacity" of businesses included in an availability analysis.⁴ One approach to accounting for differing capacities among different types of businesses is to examine relatively small contracts, a technique noted in *Rothe Development Corp. v. U.S. Department of Defense*. In addition to examining small contracts, BBC directly measured capacity in its availability analysis.⁵

Measurement of capacity. The availability analysis produced a database of 988 businesses potentially available for Washington State Department of Transportation (WSDOT) work.⁶ "Relative capacity" for a business is measured as the largest contract or subcontract that the business bid on or performed in Washington within the five years preceding when BBC interviewed it. BBC uses relative capacity as one factor in determining whether a business would be available to bid on specific WSDOT prime contracts and subcontracts.

Assessment of possible disparities in capacity of MBE/WBEs and majority-owned businesses.

One factor that affects capacity is the specializations, or subindustries, of businesses within the transportation contracting industry. Subindustries such as bridge and elevated highway construction tend to involve relatively large projects. Other subindustries, such as surveying, typically involve smaller projects. One way of accounting for variation in capacities among businesses in different subindustries is to assess whether a business has a capacity above or below the median level of businesses in the same subindustry.

BBC tested whether MBE/WBEs bid on larger or smaller prime contracts or subcontracts compared with other businesses in the same subindustry. Figure H-10 indicates the median bid capacity among Washington-based businesses in each of the 22 subindustries that the study team examined in the availability analysis. Note that the interview questions regarding the largest project that businesses had bid on or been awarded captured data in dollar ranges rather than in specific dollar amounts.

⁴ For example, see 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).*

⁵ See Appendix D for details about the availability interview process.

 $^{^6}$ Two hundred and thirty-eight of those businesses were not included in the availability marketplace analysis reported in this section, because they did not provide responses to questions D2 or D4 on the availability interview.

Figure H-10. Median bid capacity by subindustry

Subindustry	Median Bid Capacity		
Construction			
Asphalt and concrete supply	\$100,000 to \$500,000		
Bridge and elevated highway construction	\$2 million to \$5 million		
Construction sand and gravel	\$100,000 to \$500,000		
Electrical work, lighting, and signals	\$500,000 to \$1 million		
Excavation, grading, drainage, drilling, and demolition	\$100,000 to \$500,000		
Fencing, guardrails, barriers, and signs	\$500,000 to \$1 million		
Heavy construction equipment rental	\$100,000 to \$500,000		
Highway, street, and tunnel construction	\$500,000 to \$1 million		
Landscaping and erosion control	\$100,000 to \$500,000		
Marine work and dredging	\$5 million to \$10 million		
Other construction services	\$100,000 or less		
Other construction supplies	\$500,000 to \$1 million		
Painting, striping, and marking	\$100,000 to \$500,000		
Structural steel erection	\$100,000 to \$500,000		
Traffic control and flagging services	\$100,000 to \$500,000		
Trucking and hauling	\$100,000 to \$500,000		
Water, sewer, and utility lines	\$1 million		
Professional services			
Construction management	\$100,000 to \$500,000		
Engineering	\$100,000 to \$500,000		
Environmental research and testing services	\$100,000 to \$500,000		
Other professional services	\$100,000 to \$500,000		
Surveying	\$100,000 or less		

Source: BBC Research & Consulting from 2012 Availability Interviews.

Construction. An initial question is whether MBE/WBEs are as likely as majority-owned businesses to have above-median capacities within their subindustries. Figure H-11 presents those results for construction businesses. MBE/WBEs were about as likely as majority-owned businesses to have above-median capacities.

- About 40 percent of MBE and majority-owned construction businesses had above-median relative capacities.
- Compared to majority-owned businesses, a slightly smaller percentage of WBE construction businesses (38%) reported relative capacities that were higher than the median for their subindustries.

Figure H-11.
Proportion of firms with above-median bid capacity by ownership

Source: BBC Research & Consulting from 2012 Availability Interviews.

Firm ownership	Construction	Engineering
Minority	40 %	43 %
Female	38	17
Majority	40	34

Engineering. Figure H-11 also shows the percentage of engineering businesses that reported relative capacities that exceeded the median for their subindustries.

- About 43 percent of MBE engineering businesses reported that they had relative capacities that were higher than the median for their subindustries.
- Compared to MBEs, a smaller percentage of WBEs (17%) and majority-owned engineering businesses (34%) reported having above-median bid capacities.

Further analysis. BBC considered whether race- and gender-neutral factors could account for the disparities in relative capacity identified for MBEs and WBEs in construction and engineering. There were several variables from the availability interviews that may be related to relative capacity — for example, annual revenue, number of employees, and whether a business has multiple establishments in Washington.

After considering business characteristics from the availability interviews, the study team determined that age of business was the race- and gender-neutral neutral factor that might best explain differences in relative capacity within a subindustry, while also being external to capacity measures. Theoretically, the longer that companies are in business, the larger the contracts or subcontracts that they might pursue.

To test that hypothesis, the study team conducted separate logistic regression analyses for the construction and engineering industries to determine whether relative capacity could be at least partly explained by the age of businesses and whether MBE/WBEs differ from majority-owned businesses of similar ages in terms of capacity.

The results for the Washington construction industry are shown in Figure H-12. The results of the analysis indicated the following:

- Business age was a significant predictor of having above-median capacity. The older a business, the more likely it was to show above-median capacity.
- Minority ownership was positively related to showing above-median capacity, but that effect was not statistically significant.
- WBE ownership was positively related to having above-median capacity, but that effect was not statistically significant.

Figure H-12. Washington transportation construction industry bid capacity model

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^{*} Denotes statistical significance at the 95% confidence level.

Source:

BBC Research & Consulting from 2012 Availability Interviews.

Variable	Coefficient	Z-Statistic
Constant	-0.99	-5.34 *
Age of firm	0.02	3.56 *
Minority	0.18	0.55
Female	0.05	0.16

Results for the Washington engineering industry are shown in Figure H-13. The logistic regression model for the industry indicated:

- Business age was a significant predictor of having above-median capacity for engineering businesses. The older a business, the more likely it was to show above-median bid capacity.
- Minority ownership was positively related to having above-median capacity, but that effect was not statistically significant.
- WBE ownership was negatively related to having above-median capacity, but that effect was not statistically significant.

Figure H-13.

Washington transportation engineering industry bid capacity model

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^{*} Denotes statistical significance at the 95% confidence level.

Source

BBC Research & Consulting from 2012 Availability Interviews.

Variable	Coefficient	Z-Statistic
Constant Age of firm	-1.29 0.02	-5.29 * 3.39 *
Minority	0.72	1.76
Female	-0.87	-1.62

Summary of markets, contracting roles, and bid capacity. Availability interview results show that many MBE/WBEs attempt to work as prime contractors and as subcontractors on both public and private sector contracts:

- Availability interview results for businesses in the construction and engineering industries indicated that MBE/WBEs were slightly more likely to have pursued work in the public sector than the private sector within the past five years.
- MBEs in the engineering industry were less likely than WBEs and majority-owned businesses to have said that they pursued private sector work in the past five years.
- Overall, majority-owned businesses were more likely than MBE/WBEs to report that they
 have bid as prime contractors. That result was observed in both the construction and
 engineering industries and in the public and private sectors.

Data from the availability interviews also indicated differences in the success that businesses experience in obtaining work:

■ WBEs were more successful in obtaining construction work in the private sector than MBEs and majority-owned businesses.

- WBEs were less likely to obtain engineering work in both the public and private sectors than MBEs and majority-owned businesses.
- MBEs were more successful at obtaining work in the engineering industry both in the public and private sectors than WBEs and majority-owned businesses.

There were also differences in the largest transportation prime contracts and subcontracts that businesses reported receiving in Washington in the past five years. Among both construction and engineering businesses, MBE/WBEs were less likely than majority-owned businesses to report that their largest contracts were worth \$5 million or more. Compared to MBEs and majority-owned businesses, WBEs were more likely to report that their largest contracts were worth \$1 million or less. That result was observed in both the construction and engineering industries.

BBC also examined the largest contracts businesses reported bidding on or receiving in the transportation contracting industry in Washington in the past five years ("relative capacity"). WBEs in engineering were much less likely than MBEs and majority-owned businesses to have capacities exceeding the median for their subindustries. Overall, MBE/WBEs in the construction industry were about as likely to have above-median capacities as majority-owned businesses in the same subindustries.

Business Closures, Expansions, and Contractions

BBC used Small Business Administration (SBA) data to examine business outcomes — including closures, expansions, and contractions — for minority-owned businesses in Washington and in the nation as a whole. The SBA analyses compare business outcomes for minority-owned businesses (by demographic group) to business outcomes for all businesses.

Business closures. High rates of business closures may reflect adverse business conditions for minority business owners.

Overall rates of business closures in Washington. A 2010 SBA report investigated business dynamics and whether minority-owned businesses were more likely to close than other businesses. By matching data from business owners who responded to the 2002 U.S. Census Bureau Survey of Business Owners (SBO) to data from the Census Bureau's 1989-2006 Business Information Tracking Series, the SBA reported on business closure rates between 2002 and 2006 across different sectors of the economy. Figure H-14 presents those data for African American-, Asian American-, and Hispanic American-owned businesses as well as for white-owned businesses.

As shown in Figure H-14, 38 percent of African American-owned businesses that were operating in Washington in 2002 had closed by the end of 2006, a higher rate than those of other groups, including white-owned businesses (30%). Hispanic American- (36%) and Asian American-

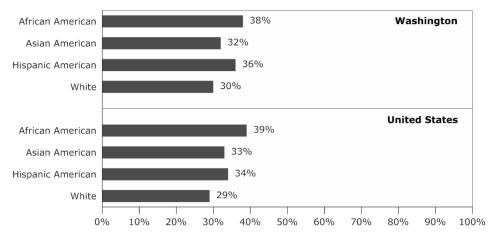
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⁷ Lowrey, Ying. 2010. "Race/Ethnicity and Establishment Dynamics, 2002-2006." U.S. Small Business Administration Office of Advocacy. Washington D.C.

⁸ Businesses classifiable by race/ethnicity exclude publicly traded companies. The study team did not categorize racial groups by ethnicity. As a result some Hispanic Americans may also be included in statistics for African Americans, Asian Americans, and whites.

owned businesses (32%) also had closure rates that were higher than that of white-owned businesses. Differences in closure rates between minority-owned businesses and white-owned businesses were similar in Washington and in the United States during that time period.

Figure H-14. Rates of business closure, 2002 through 2006, Washington and the U.S.



Note: Data refer only to non-publicly held businesses only. 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. 2010. "Race/Ethnicity and Establishment Dynamics, 2002-2006." U.S. Small Business Administration Office of Advocacy. Washington D.C.

Rates of business closures by industry. The SBA report also examined business closure rates by race/ethnicity for 21 different industry classifications. Figure H-15 compares national rates of firm closure for the two industry classifications most related to the transportation contracting industry — construction and professional, scientific, and technical services (which includes engineering). Figure H-15 also presents closure rates for all industries by race/ethnicity.

African American-owned businesses that were operating in the United States in 2002 had the highest rate of closure by 2006 among all racial/ethnic groups — including white-owned businesses — in construction (43%); professional, scientific, and technical services (39%); and all industries (39%). Hispanic American-owned businesses and Asian American-owned businesses that were operating in 2002 were also more likely to have closed by 2006 than white-owned businesses in construction; professional, scientific, and technical services; and all industries. The study team could not examine whether those differences also existed in Washington, because the SBA analysis by industry was not available for individual states.

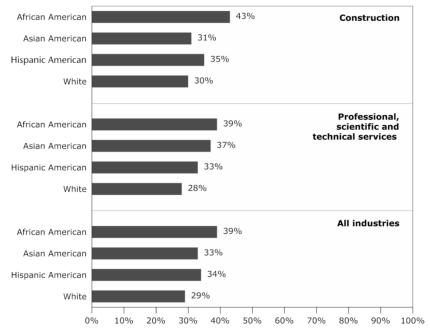
Unsuccessful closures. Not all business closures can be interpreted as "unsuccessful closures." Businesses may close when an owner retires or a more profitable business opportunity emerges, both of which represent "successful closures." The 1992 Characteristics of Business Owners (CBO) Survey is one of the few Census Bureau sources to classify business closures into successful and unsuccessful subsets. The 1992 CBO combines data from the 1992 Economic Census and a survey of business owners conducted in 1996. The survey portion of the 1992 CBO

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⁹ CBO data from the 1997 and 2002 Economic Censuses do not include statistics on successful and unsuccessful business closures. To date, the 1992 CBO is the only U.S. Census dataset that includes such statistics.

asked owners of businesses that had closed between 1992 and 1995, "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 that reported being unsuccessful at the time of closure was understood to have failed.

Figure H-15.
Rates of business closure, 2002 through 2006, construction; professional, scientific, and technical services; and all industries in the U.S.



Note: Data refer only to non-publicly held businesses. 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. 2010. "Race/Ethnicity and Establishment Dynamics, 2002-2006." U.S. Small Business Administration Office of Advocacy. Washington D.C.

Figure H-16 presents CBO data on the proportion of businesses that closed due to failure between 1992 and 1995 in construction; professional, scientific, and technical services; and all industries. ^{10,11} According to CBO data, African American-owned businesses were the most likely to report being "unsuccessful" at the time at which their businesses closed. About 77 percent of African American-owned businesses in all industries reported an unsuccessful business closure between 1992 and 1995, compared with only 61 percent of non-Hispanic white male-owned businesses. Unsuccessful closure rates were also relatively high for Hispanic American-owned businesses (71%) and for businesses owned by "other minority groups" (73%). The rate of

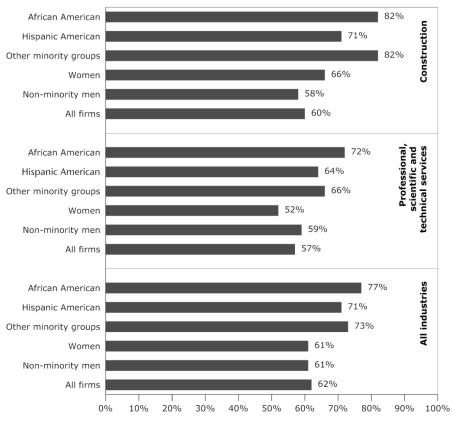
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¹⁰ All CBO data should be interpreted with caution as businesses that did not respond to the survey cannot be assumed to have the same characteristics of ones that did. Holmes, Thomas J. and James Schmitz. 1996. "Nonresponse Bias and Business Turnover Rates: The Case of the Characteristics of Business Owners Survey." *Journal of Business & Economic Statistics*. 14(2): 231-241. This report does not include CBO data on overall business closure rates, because businesses not responding to the survey were found to be much more likely to have closed than ones that did.

¹¹ This study includes CBO data on firm success because there is no compelling reason to believe that closed businesses responding to the survey would have reported different rates of success/failure than those closed businesses 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.

unsuccessful closures for women-owned businesses (61%) was similar to that of non-Hispanic white male-owned businesses.

Figure H-16.
Unsuccessful closure rates for businesses that closed between 1992 and 1995 in the U.S.



Source: U.S. Census Bureau, 1996 Characteristics of Business Owners Survey (CBO).

In the construction industry, minority- and women-owned businesses were more likely to report unsuccessful business closures than non-Hispanic white male-owned businesses (58%). Those trends were similar in the professional services industry with one exception — women-owned businesses (52%) were less likely to report unsuccessful closures than non-Hispanic white male-owned businesses (59%).

Reasons for differences in unsuccessful closure rates. Several researchers have offered explanations for higher rates of unsuccessful closures among minority- and women-owned businesses compared with non-Hispanic white-owned businesses:

■ Unsuccessful business failures of minority-owned businesses are largely due to barriers in access to capital. Regression analyses have identified initial capitalization as a significant factor in determining firm viability. Because minority-owned businesses secure smaller amounts of debt equity in the form of loans, they may be more liable to fail. Difficulty in

- accessing capital is found to be particularly acute for minority-owned businesses in the construction industry. 12
- Prior work experience in a family member's business or similar experiences are found to be strong determinants of business viability. Because minority business owners are much less likely to have such experience, their businesses are less likely to survive. Similar research has been conducted for women-owned businesses and found similar gender-based gaps in the likelihood of business survival.
- Level of education is found to be a strong determinant of business survival. Educational attainment explains a substantial portion of the gap in business closure rates between African American-owned and non-minority-owned businesses.¹⁵
- Non-minority business owners have the opportunity to pursue a 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 limited employment options and are less likely to close a successful business.¹⁶
- The possession of greater initial capital and generally higher levels of education among Asian Americans are related to the relatively high rate of survival of Asian American-owned businesses compared to other minority-owned businesses.¹⁷

Expansions and contractions. Comparing rates of expansion and contraction between minority-owned and white-owned businesses is also useful in assessing the success of minority-owned businesses. As with closure data, only some of the data on expansions and contractions that were available for the nation were also available at the state level.

Expansions. The 2010 SBA study of minority business dynamics from 2002 through 2006 examined the number of non publicly-held Washington businesses that expanded and contracted between 2002 and 2006. Figure H-17 presents the percentage of all businesses, by race/ethnicity of ownership, that increased their total employment between 2002 and 2006. Those data are presented for Washington and for the nation as a whole.

 16 Bates, Timothy. 2002. "Analysis of Young Small Businesses That Have Closed: Delineating Successful from Unsuccessful Closures." Center for Economic Studies, U.S. Census Bureau.

¹² 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.

¹³ 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.

¹⁴ Fairlie, R. and A. Robb. 2009. "Gender Differences in Business Performance: Evidence from the Characteristics of Business Owners Survey." University of California, Santa Cruz.

¹⁵ Ibid. 24.

¹⁷ Bates, Timothy. 1993. "Determinants of Survival and Profitability Among Asian Immigrant-Owned Small Businesses." Center for Economic Studies, U.S. Census Bureau.

African American Washington 30% Asian American Hispanic American White 31% **United States** African American Asian American Hispanic American White

Figure H-17. Percentage of businesses that expanded, 2002 through 2006

20%

10%

30%

0%

40% Data refer only to non-publicly held businesses. 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, 2010, "Race/Ethnicity and Establishment Dynamics, 2002-2006," U.S. Small Business Administration Office

According to the SBA study, approximately 31 percent of white-owned Washington businesses expanded between 2002 and 2006, compared to 24 percent of African American-owned businesses, 30 percent of Asian American-owned businesses, and 32 percent of Hispanic American-owned businesses. Expansion results were similar for the nation as a whole.¹⁸

50%

60%

70%

80%

90%

100%

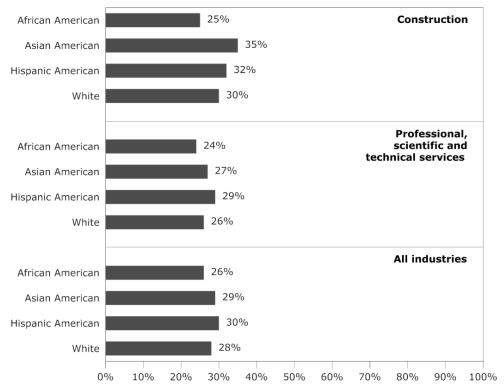
Figure H-18 presents the percentage of businesses that expanded in construction; professional, scientific, and technical services; and in all industries in the United States. The 2010 SBA study did not report results for businesses in individual industries at the state level. At the national level, the patterns evident for construction and professional, scientific, and technical services were similar to those observed for all industries:

- African American-owned construction and professional, scientific, and technical services businesses were less likely than white-owned businesses to have expanded between 2002 and 2006.
- Hispanic American- and Asian American-owned companies in both construction and professional, scientific, and technical services were slightly more likely than white-owned businesses to have expanded between 2002 and 2006.

Contractions. Figure H-19 shows the percentage of non-publicly held businesses operating in 2002 that reduced their employment (i.e., contracted) between 2002 and 2006 in Washington and in the nation as a whole. At both the state level and the national level, African American-(20%), Asian American- (20%), and Hispanic American-owned businesses (17%) were slightly less likely than white-owned businesses (22%) to have contracted between 2002 and 2006.

¹⁸ Lowrey, Ying. 2010. "Race/Ethnicity and Establishment Dynamics, 2002-2006." U.S. Small Business Administration Office of Advocacy. Washington D.C.

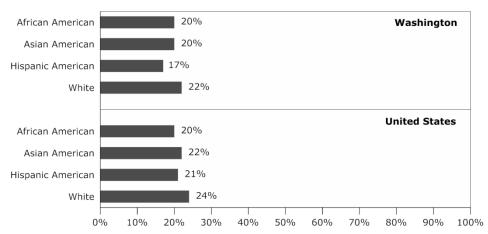
Figure H-18.
Percentage of businesses expanding, 2002 through 2006, U.S. construction; professional, scientific, and technical services; and all industries



Note: Data refer only to non-publicly held businesses. 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. 2010. "Race/Ethnicity and Establishment Dynamics, 2002-2006." U.S. Small Business Administration Office of Advocacy. Washington D.C.

Figure H-19.
Percentage of businesses contracting, 2002 through 2006

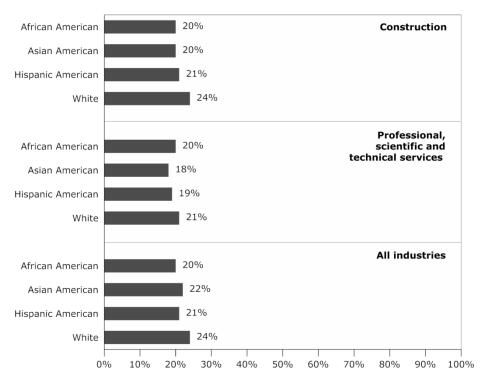


Note: Data refer only to non-publicly held businesses. As sample sizes are not reported, statistical significance of these results cannot be determined; however, statistics are consistent with SBA data quality guidelines.

Source: Lowrey, Ying. 2010. "Race/Ethnicity and Establishment Dynamics, 2002-2006." U.S. Small Business Administration Office of Advocacy. Washington D.C.

The SBA study did not report state-specific results relating to contractions in individual industries. Figure H-20 shows the percentage of businesses that contracted in construction; professional, scientific, and technical services; and all industries at the national level. Compared to white-owned construction businesses in the United States, a slightly smaller percentage of African American-, Hispanic American-, and Asian American-owned construction and professional, scientific, and technical services businesses contracted between 2002 and 2006.

Figure H-20. Rates of business contraction, 2002 through 2006, U.S. construction; professional, scientific and technical services; and all industries



Note: Data refer only to non-publicly held businesses. 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. 2010. "Race/Ethnicity and Establishment Dynamics, 2002-2006." U.S. Small Business Administration Office of Advocacy. Washington D.C.

Business Receipts and Earnings

Annual business receipts and earnings for business owners are also indicators of the success of businesses. The study team examined:

- Business receipts data from the 2007 SBO;
- Business earnings data for business owners from the 2000 Census and 2008-2010
 American Community Survey (ACS); and
- Annual revenue data for Washington transportation construction and engineering businesses that the study team collected as part of availability interviews.

Business receipts. BBC examined receipts for businesses in Washington and the U.S. using data from the 2007 SBO, conducted by the U.S. Census Bureau. BBC also analyzed receipts for businesses in individual industries. The SBO reports business receipts separately for employer

businesses (i.e., those with paid employees other than the business owner and family members) and for all businesses.¹⁹

Receipts for all businesses. Figure H-21 presents 2007 mean annual receipts for employer and non-employer businesses by race/ethnicity and gender. The SBO data for businesses across all industries in Washington indicate that average receipts for most minority- and women-owned businesses were much lower than that for non-Hispanic white-owned (or male-owned) businesses, with some groups faring worse than others.

Figure H-21.
Mean annual receipts
(thousands) for all
businesses, by
race/ethnicity and
gender of owners, 2007

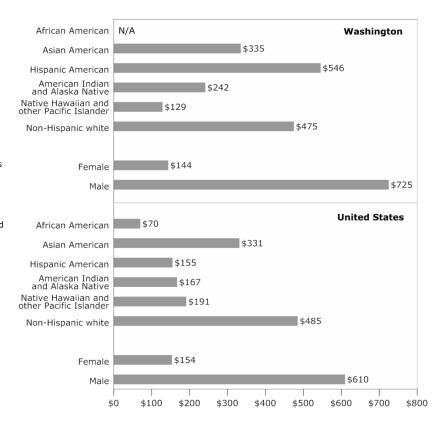
Note:

Includes employer and non-employer businesses. Does not include publicly-traded companies or other businesses not classifiable by race/ethnicity and gender. As sample sizes are not reported, statistical significance of these results cannot be determined.

Estimates for African American-owned businesses were suppressed by the SBO because publication standards were not met.

Source:

2007 Survey of Business Owners, part of the U.S. Census Bureau's 2007 Economic Census.



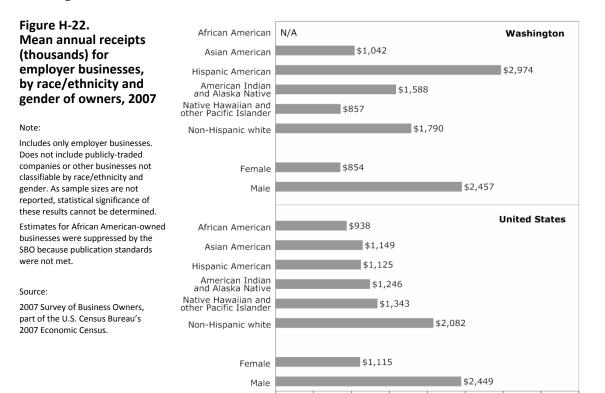
- Average receipts of Native Hawaiian-owned businesses (\$129,000) were approximately one-quarter that of non-Hispanic white-owned businesses (\$475,000).
- Average receipts of American Indian and Alaska Native-owned businesses (\$242,000) were approximately half the average of non-Hispanic white-owned businesses.
- Asian American-owned businesses had average receipts (\$335,000) that were 71 percent of the average of non-Hispanic white-owned businesses.
- Hispanic American-owned businesses had higher average receipts (\$546,000) than non-Hispanic white-owned businesses.
- Average receipts for women-owned businesses (\$144,000) were about 20 percent of the average of male-owned businesses (\$725,000).

¹⁹ We use "all businesses" to denote SBO data used in this analysis. The data include incorporated and unincorporated businesses, but not publicly-traded companies or other businesses not classifiable by race/ethnicity and gender.

The SBO did not disclose annual receipts for African American-owned businesses in Washington because publication standards were not met.²⁰

Disparities in business receipts for minority- and women-owned businesses compared to non-Hispanic white- and male-owned businesses in Washington are consistent with those seen in the United States as a whole. However, the national average of Hispanic American-owned businesses' receipts (\$331,000) was approximately one-third that of non-Hispanic white-owned businesses (\$485,000) in the U.S. A 2007 SBA study identified differences similar to those presented in Figure H-21 when examining businesses in all industries across the U.S.²¹

Figure H-22 presents average annual receipts in 2007 for only employer businesses in Washington and in the United States.



Minority-owned employer businesses, except for Hispanic-American owned businesses, had substantially lower average business receipts than non-Hispanic white-owned businesses in Washington.

\$500

\$0

Average annual receipts of Native Hawaiian- (\$857,000) and Asian American-owned employer businesses (\$1.0 million) in Washington were 48 percent and 58 percent of the average of non-

\$1,000 \$1,500 \$2,000 \$2,500 \$3,000 \$3,500 \$4,000

 $^{^{20}}$ An exact reason is not provided but an example of failure to meet publication standards that the SBO provides is when the standard error of the sales and receipts is 50 percent or more.

²¹ 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.

Hispanic white-owned businesses (\$1.8 million), respectively. Average receipts of American Indian and Alaska Native-owned businesses (\$837,000) were 89 percent that of non-Hispanic white-owned businesses in Washington. As was the case for both employer and non-employer businesses, Hispanic American-owned businesses had higher average receipts than all businesses. The SBO did not disclose annual receipts for African American-owned businesses in Washington because publication standards were not met.

Average receipts for women-owned employer businesses (\$854,000) were about one-third that of male-owned businesses in Washington (\$2.5 million).

Receipts by industry. The study team also analyzed SBO receipts data separately for businesses in construction and professional, scientific, and technical services. Figure H-23 presents mean annual receipts in 2007 for all (i.e., employer and non-employer businesses combined) construction and professional, scientific, and technical services businesses and for just employer businesses by racial/ethnic and gender group. Results are presented for Washington and for the nation as a whole.

Figure H-23.

Mean annual receipts (thousands) for businesses in the construction and professional, scientific and technical services industries, by race/ethnicity and gender of owners, 2007

	All firms		Emp	loyer firms
	Construction	Professional, scientific & technical services	Construction	Professional, scientific & technical services
Washington				
African American	\$207	\$71	\$908	\$489
Asian American	\$405	\$139	\$1,103	\$637
Hispanic American	\$251	\$85	\$644	\$466
American Indian and Alaska Native	\$694	\$94	\$1,788	\$858
Native Hawaiian and other Pacific Islander	\$153	\$77	\$364	\$576
Non-Hispanic White	\$718	\$181	\$1,674	\$772
Female	\$556	\$80	\$1,475	\$435
Male	\$748	\$256	\$1,911	\$957
United States				
African American	\$107	\$78	\$1,069	\$717
Asian American	\$273	\$201	\$1,533	\$950
Hispanic American	\$167	\$121	\$1,083	\$693
American Indian and Alaska Native	\$262	\$116	\$1,390	\$630
Native Hawaiian and other Pacific Islander	\$363	\$187	\$1,628	\$1,148
Non-Hispanic White	\$502	\$213	\$1,850	\$869
Female	\$361	\$98	\$1,625	\$543
Male	\$480	\$276	\$2,008	\$1,031

Notes: Does not include publicly-traded companies or other businesses not classifiable by race/ethnicity and gender. As sample sizes are not reported, statistical significance of these results cannot be determined.

Source: 2007 Survey of Business Owners, part of the U.S. Census Bureau's 2007 Economic Census.

Construction. In the Washington construction industry, average 2007 receipts for minority-owned businesses were lower than the average for non-Hispanic white-owned businesses (\$718,000). Results for all businesses (i.e., employer and non-employer businesses combined) indicate that:

- Average receipts of African American-owned construction businesses (\$207,000) were 29 percent that of non-Hispanic white-owned Washington construction businesses.
- Average receipts of Hispanic American-owned construction businesses (\$251,000) were 35 percent that of non-Hispanic white-owned construction businesses.
- Native Hawaiian-owned construction businesses (\$153,000) exhibited revenues that were less than one-quarter the average of non-Hispanic white-owned businesses.
- Average receipts of Asian American-owned construction businesses (\$405,000) were 56 percent that of non-Hispanic white-owned construction businesses in Washington.
- Average receipts of American Indian and Alaska Native-owned construction businesses were slightly below that of non-Hispanic white-owned construction businesses.

Average receipts for women-owned construction businesses in Washington (\$556,000) were approximately three-quarters the average of male-owned businesses (\$748,000).

Although SBO data indicated that average receipts were higher for construction employer businesses than for all construction businesses (i.e., employer and non-employer businesses combined), average receipts for African American-, Asian American-, Hispanic American-, and Native-Hawaiian-owned construction employer businesses were still substantially less than that of non-Hispanic white-owned construction employer businesses (\$1.7 million). Average receipts for women-owned construction businesses (\$1.5 million) were less than the average of maleowned employer businesses (\$1.9 million).

Professional, scientific, and technical services. In the Washington professional, scientific, and technical services industry, minority-owned businesses had lower average receipts than non-Hispanic white-owned businesses. Results for all businesses (i.e., employer and non-employer businesses combined) in the professional, scientific, and technical services industry indicated that:

- Average receipts of African American-owned businesses (\$71,000) were about 39 percent that of non-Hispanic white-owned businesses (\$181,000).
- Average receipts of Native Hawaiian-owned businesses were about 43 percent that of non-Hispanic white-owned businesses.
- Average receipts of Hispanic American-owned (\$85,000) were less than half that of non-Hispanic white-owned businesses.
- Average receipts of American Indian and Alaska Native-owned businesses (\$94,000) were approximately 52 percent that of non-Hispanic white-owned businesses.
- Average receipts f of Asian American-owned businesses (\$139,000) were substantially less than that of non-Hispanic white-owned businesses.

Average receipts of women-owned businesses in the Washington professional, scientific, and technical services industry (\$80,000) were less than one-third that of male-owned businesses (\$256,000).

An examination of only employer businesses in professional, scientific, and technical services showed similar results except for Native American-owned businesses. Among employer businesses, Native American-owned businesses exhibited higher average receipts than non-Hispanic white-owned Washington employer businesses in professional, scientific, and technical services in 2007.

Business earnings. In order to assess the success of self-employed minorities and women in the transportation contracting industry, BBC examined earnings of business owners using Public Use Microdata Series (PUMS) data from the 2000 U.S. Census and 2008-2010 ACS. BBC analyzed earnings of incorporated and unincorporated business owners age 16 and older who reported positive business earnings.

Construction business owner earnings, 1999. Figure H-24 shows average earnings in 1999 for business owners in the construction industry in Washington and in the United States. Due to small sample sizes for individual racial/ethnic groups, BBC grouped all minority business owners except Hispanic Americans together. Business earning results for 1999 were based on the 2000 Census, in which individuals were asked to give their business income for the previous year. Results indicated that:

- On average, Hispanic American construction business owners in Washington (\$33,015) earned less than non-Hispanic white construction business owners (\$35,104), but that difference was not statistically significant.
- Non-Hispanic minority construction business owners (\$38,876) earned more than non-Hispanic white business owners, but that difference was not statistically significant.
- In the United States as a whole both Hispanic and non-Hispanic minority business owners earned less than non-Hispanic white business owners and those differences were statistically significant.
- Female construction business owners in Washington (\$25,583) earned substantially less, on average, than male construction business owners (\$36,021). A similar disparity was also evident on a national level.

\$20,000

\$10,000

Figure H-24.
Mean annual business owner earnings in the construction industry, 1999

Note:

The sample universe is business owners age 16 and over who reported positive earnings. "Non-Hispanic minority" includes African 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.

All amounts in 1999 dollars.

\$40,000

\$50,000

\$60,000

*,** Denotes statistically significant differences from non-Hispanic whites (for minority groups) or from men (for women) at the 90% and 95% confidence level, respectively.

Source:

BBC Research & Consulting from 2000 U.S. Census 5% sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

\$30,000

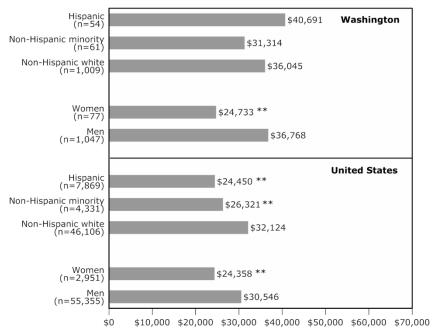
Construction business owner earnings, 2007-2010. The 2008-2010 ACS also reports business owner earnings. Because of the way that the U.S. Census Bureau conducts each year's ACS, earnings for business owners reported in the 2008 through 2010 sample were for the previous 12 months between 2007 and 2010.²² However, all dollar amounts are presented in 2010 dollars.

Figure H-25 shows earnings in 2007 through 2010 for business owners in the construction industry in Washington and the nation as a whole. Again, due to sample sizes for individual minority groups, all minority groups except Hispanic Americans are combined into a non-Hispanic minority category. Similar to 2000 earnings data, there were differences in earnings between minority business owners and non-Hispanic white business owners in Washington but the differences were not statistically significant. Nationally, both Hispanic and non-Hispanic minority business owners earned significantly less than non-Hispanic white business owners in the construction industry.

Earnings differences between female and male business owners in the construction industry persisted in 2007 through 2010, both in Washington and the nation as a whole. Female business owners earned less than their male counterparts both in Washington and in the U.S. as a whole.

²² For example, if a business owner completed the survey on January 1, 2008, the figures for the previous 12 months would reference January 1, 2007 to December 31, 2007. Similarly, a business owner completing the survey December 31, 2010 would reference amounts since January 1, 2010.

Figure H-25. Mean annual business owner earnings in the construction industry, 2007 through 2010



Note: The sample universe is business owners age 16 and over who reported positive earnings. "Non-Hispanic minority" includes African 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.

All amounts in 2010 dollars.

*,** Denotes statistically significant differences from non-Hispanic whites (for minority groups) or from men (for women) at the 90% and 95% confidence level, respectively.

Source: BBC Research & Consulting from 2008-2010 ACS. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

Engineering business owner earnings, 1999. Figure H-26 presents average earnings in 1999 for business owners in the engineering industry in the United States. Those results are based on the 2000 Census. Due to very small sample sizes for minority business owners in the Washington engineering industry, only national results are presented in Figure H-26.²³

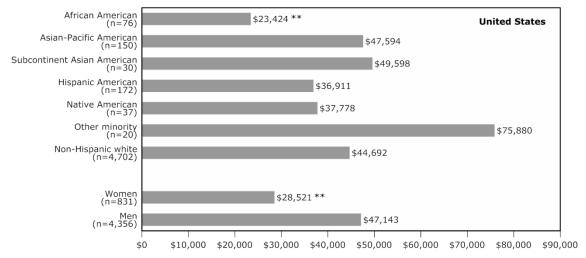
- African American engineering business owners in the United States had average earnings of \$23,424 in 1999 — substantially less than non-Hispanic white engineering business owners (\$44,692). That difference was statistically significant.
- On average, Hispanic American (\$36,911) and Native American (\$37,778) engineering business owners in the United States also earned less than non-Hispanic white engineering business owners in 1999, but those differences were not statistically significant.
- Both Asian-Pacific American (\$47,594) and Subcontinent Asian American (\$49,598) business owners had higher average earnings than non-Hispanic whites, but those differences were not statistically significant.

BBC RESEARCH & CONSULTING — FINAL REPORT

²³ Only four minority business owners age 16 and over reported positive business earnings in Washington in the 2000 Census 5% sample.

■ Female engineering business owners in the United States (\$28,521) earned significantly less than male business owners (\$47,143) in 1999.

Figure H-26. Mean annual business owner earnings in the engineering industry, 1999



Note: The sample universe is business owners age 16 and over who reported positive earnings.

All amounts in 1999 dollars.

** Denotes statistically significant differences from non-Hispanic whites (for minority groups) or from men (for women) at the 90% and 95% confidence level, respectively.

Source: BBC Research & Consulting from 2000 U.S. Census 5% sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

Engineering business owner earnings, 2007-2010. As with earnings data for the construction industry, earnings for engineering business owners that were reported in the 2008-2010 ACS sample were for the time period between 2007 and 2010. Those results are shown in Figure H-27.

All dollar amounts are presented in 2010 dollars. Due to small sample sizes for minority business owners, only national earnings are displayed.²⁴ As shown in Figure H-27, differences in business earnings between minority business owners and non-Hispanic white business owners were evident in the engineering industry in 2007 through 2010. However, none of those differences were statistically significant.

The study team observed statistically significant differences between female (\$38,327) and male (\$58,418) engineering business owners in 2007 through 2010.

Regression analyses of business earnings. Differences in business earnings among different racial/ethnic and gender groups may be at least partially attributable to race- and gender-neutral factors such as age, marital status, and educational attainment. BBC performed regression analyses using 2000 Census and 2008-2010 ACS data to examine whether there were differences in business earnings between minorities and non-Hispanic whites and between women and men after statistically controlling for certain race- and gender-neutral factors.

_

Only 10 minority business owners age 16 and over reported positive business earnings in Washington in the 2008-2010 ACS
 sample.

\$44,929 United States Asian-Pacific American (n=134) \$54,845 Subcontinent Asian American (n=32) Native American (n=26) Other minority (n=6) Women (n=703) \$38,327 **

Figure H-27. Mean annual business owner earnings in the engineering industry, 2007 through 2010

\$10,000 The sample universe is business owners age 16 and over who reported positive earnings. All amounts in 2010 dollars.

Men (n=3,275)

** Denotes statistically significant differences from non-Hispanic whites (for minority groups) or from men (for women) at the 90% and 95% confidence level, respectively.

\$30,000

\$40,000

\$50,000

\$58,418

\$70,000

\$80,000

\$60,000

Source: BBC Research & Consulting from 2008-2010 ACS. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

\$20,000

BBC applied an ordinary least squares regression model to the data that was very similar to models reviewed by courts after other disparity studies.²⁵ The dependent variable in the model was the natural logarithm of business earnings. Business owners that reported zero or negative business earnings were excluded, as were observations for which the U.S. Census Bureau had imputed values of business earnings. Along with variables for the race/ethnicity and gender of business owners, the model also included available measures from the data considered likely to affect earnings potential, including age, age-squared, marital status, ability to speak English well, disability condition, and educational attainment.

For the construction industry, the study team developed two models:

- A model for business owner earnings in 1999 for the Washington construction industry that included 1,202 observations; and
- A model for business owner earnings in 2007 through 2010 for the Washington construction industry that included 942 observations.

Due to small sample sizes, BBC used a different approach when examining business owner earnings in the engineering industry. BBC created an engineering industry model for the United States that included separate terms to account for the effect of business locations in Washington. Those terms included an indicator variable for location and interaction variables that indicated minority or female business owners in the state. That approach was similar to those used by other researchers.

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 $^{^{25} \} For example, National \ Economic \ Research \ Associates, Inc. \ 2000. \ \textit{Disadvantaged Business Enterprise Availability Study}.$ 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.

BBC created the following models for the engineering industry:

- A model for business owner earnings in 1999 for the United States that included 4,123 observations; and
- A model for business owner earnings in 2007 through 2010 for the United States that included 3,467 observations.

Construction industry in Washington, 1999. Figure H-28 presents the results of the regression model for 1999 business earnings in the Washington construction industry. The model indicated that several race- and gender-neutral factors significantly predicted earnings of business owners in the Washington construction industry:

- Being older was associated with higher business earnings (age had less of an effect for the oldest individuals);
- Being married was associated with higher business earnings; and
- Having some college education was associated with lower business earnings than having only a high school diploma or equivalent (other measures of educational attainment were not significant).

After accounting for race- and gender neutral factors, the model did not indicate statistically significant effects of race/ethnicity. However, being female was associated with lower business earnings, and that effect was statistically significant.

Figure H-28. Washington construction business owner earnings model, 1999

Note:

*,** Denotes statistical significance at the 90% and 95% confidence level, respectively.

Source:

BBC Research & Consulting from the 2000 U.S. Census 5% sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

Variable	Coefficient
Constant	8.763 **
Age	0.061 **
Age-squared	-0.001 **
Married	0.193 **
Speaks English well	0.308
Disabled	-0.191
Less than high school	-0.178
Some college	-0.179 *
Four-year degree	-0.032
Advanced degree	-0.164
Hispanic American	-0.289
Non-Hispanic Minority	0.029
Female	-0.541 **

Construction industry in Washington, 2007 through 2010. Figure H-29 presents the results of the regression model for 2007through 2010 business earnings in the Washington construction industry. Similar to results in 1999, the model indicated that being older was associated with higher business earnings (age had less of an effect for the oldest individuals), and being married was associated with higher business earnings.

Figure H-29. Washington construction business owner earnings model, 2007-2010

Note:

*,** Denotes statistical significance at the 90% and 95% confidence level, respectively.

Source:

BBC Research & Consulting from 2008-2010 ACS. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

Variable	Coefficient
Constant	6.127 **
Age	0.151 **
Age-squared	-0.002 **
Married	0.566 **
Speaks English well	0.032
Disabled	-0.166
Less than high school	-0.008
Some college	0.095
Four-year degree	0.363
Advanced degree	0.101
Hispanic American	0.238
Non-Hispanic Minority	0.017
Female	-0.470 *

After statistically controlling for race- and gender-neutral factors, the study team observed that:

- Being female was associated with significantly lower business earnings in the Washington construction industry.
- Effects of race/ethnicity were not statistically significant.

Engineering industry in Washington, 1999. Figure H-30 presents the results of the regression model of business owner earnings in the United States engineering industry in 1999. As explained above, BBC created a national engineering industry model due to small sample sizes for Washington. However, the model included interaction terms for evaluating the effect of owning a business in Washington. A number of race- and gender-neutral factors were statistically significant in explaining business earnings in the engineering industry:

- Being older was associated with higher business earnings (age had less of an effect for the oldest individuals);
- Being married was associated with higher business earnings;
- Having a disability was associated with lower business earnings; and
- High levels of educational attainment (four-year or advanced degree) were associated with higher business earnings.

After statistically controlling for race- and gender-neutral factors, there were statistically significant effects of race/ethnicity and gender in the nation as a whole. Specifically, being African American, Native American, or female was associated with lower average business earnings. Being in the "other minority" group was associated higher average business earnings in the engineering industry.

The indicator variable for business owners in Washington and the interaction terms for minority and women business owners in Washington were not statistically significant. That result indicates that earnings for minority and female business owners in Washington are not significantly different from the U.S. as a whole after controlling for other factors.

Figure H-30.
National engineering industry
business owner earnings model, 1999

Note:

*,** Denotes statistical significance at the 90% and 95% confidence level, respectively.

Source:

BBC Research & Consulting from 2000 U.S. Census 5% sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

Variable	Coefficient
Constant	7.378 **
Age	0.120 **
Age-squared	-0.001 **
Married	0.131 **
Speaks English well	-0.089
Disabled	-0.515 **
Less than high school	-0.172
Some college	0.055
Four-year degree	0.277 **
Advanced degree	0.340 **
Hispanic American	0.156
African American	-0.416 **
Native American	-0.510 *
Asian-Pacific American	-0.020
Subcontinent Asian American	-0.331
Other minority	0.473 **
Female	-0.743 **
Washington	0.045
Minority in Washington	0.271
Female in Washington	0.136

Engineering industry in Washington, 2007 through 2010. Figure H-31 presents the results of the regression model of business owner earnings specific to the U.S. engineering industry in 2007through 2010. As in the model for 1999 earnings, the model indicated that some race- and gender-neutral factors are statistically significant in predicting the earnings of engineering business owners:

- Being older was associated with higher business earnings (age had less of an effect for the oldest individuals);
- Being married was associated with higher business earnings;
- Having a disability was associated with lower business earnings; and
- High levels of educational attainment (four-year or advanced degree) were associated with higher business earnings whereas not having a high school education was associated with lower business earnings.

After accounting for race- and gender neutral factors, the study team observed that Hispanic American engineering business owners tended to have higher average earnings than similarly situated non-Hispanic white business owners and that female business owners tended to earn less than men in the engineering industry.

The model did not indicate a statistically significant difference for business owners in Washington or female business owners in Washington. However, the statistical significance for minorities in Washington suggests that being a minority business owner in the Washington engineering industry is associated with higher earnings than being a minority business owner in the engineering industry in the nation as a whole.

Figure H-31. National engineering industry business owner earnings model, 2007-2010

Note:

*,** Denotes statistical significance at the 90% and 95% confidence level, respectively.

Source:

BBC Research & Consulting from 2008-2010 ACS. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

Variable	Coefficient
Constant	6.362 **
Age	0.126 **
Age-squared	-0.001 **
Married	0.204 **
Speaks English well	0.778
Disabled	-0.335 **
Less than high school	-1.132 *
Some college	0.072
Four-year degree	0.249 *
Advanced degree	0.404 **
Hispanic American	0.220 *
African American	-0.137
Native American	-0.515
Asian-Pacific American	0.048
Subcontinent Asian American	0.127
Other minority	-0.102
Female	-0.582 **
Washington	-0.131
Minority in Washington	1.075 *
Female in Washington	-0.062

Gross revenue of construction and engineering firms from availability interviews. In the availability telephone interviews that BBC conducted for the study, firm owners and managers were asked to identify the size range for their annual gross revenue from 2009 through 2011. A related question asked for gross revenue across all Washington locations for

Within the Washington transportation contracting industry, BBC separately examined gross revenue of construction and engineering businesses.

multi-location firms, which is the result examined here.

Construction. Figure H-32 presents the distribution of MBEs, WBEs, and majority-owned construction businesses by revenue class.

- A larger percentage of MBEs (63%) than WBEs (54%) and majority-owned businesses (46%) reported average revenue of less than \$1 million per year.
- A disproportionately small proportion of MBEs and WBEs reported average revenue of \$4.6 million or more per year (13% of MBEs and 14% of WBEs) compared with results for majority-owned businesses (22%).
- A larger percentage of majority-owned businesses (6%) reported average revenue of \$22.5 million or more than MBEs (2%) and WBEs (1%).

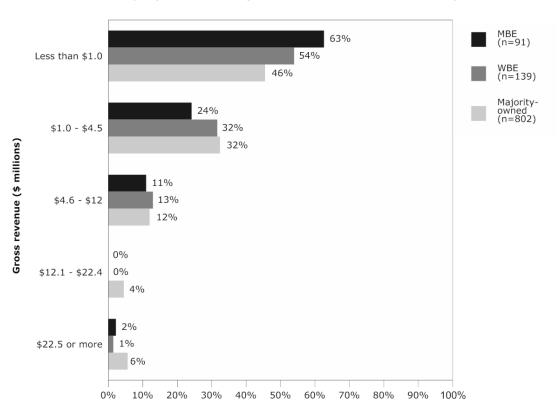


Figure H-32.
Gross revenue of company for all Washington locations, construction industry

Note: WBE is white women-owned firms.

Source: BBC Research & Consulting from 2012 Availability Interviews.

Engineering. Engineering businesses were also asked to report gross revenue across all Washington locations. Figure H-33 summarizes results.

- Compared to MBEs (55%) and majority-owned businesses (54%), a larger percentage of WBEs (63%) reported average revenue of less than \$1 million per year.
- A smaller proportion of MBEs (13%) and WBEs (12%) reported average revenue of \$4.6 million or more than majority-owned businesses (19%).
- Just two percent of MBE/WBEs reported average revenue of \$22.5 million or more compared to eight percent of majority-owned businesses that reported average revenue of that amount.

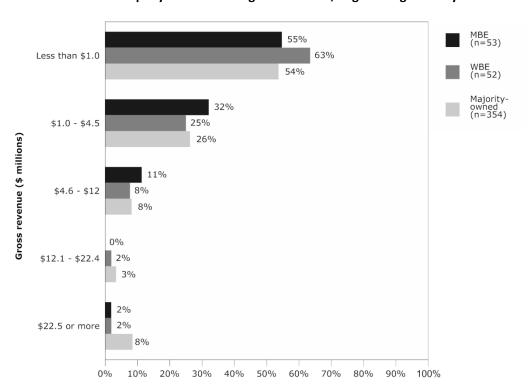


Figure H-33.
Gross revenue of company for all Washington locations, engineering industry

Note: WBE is white women-owned firms.

Source: BBC Research & Consulting from 2012 Availability Interviews.

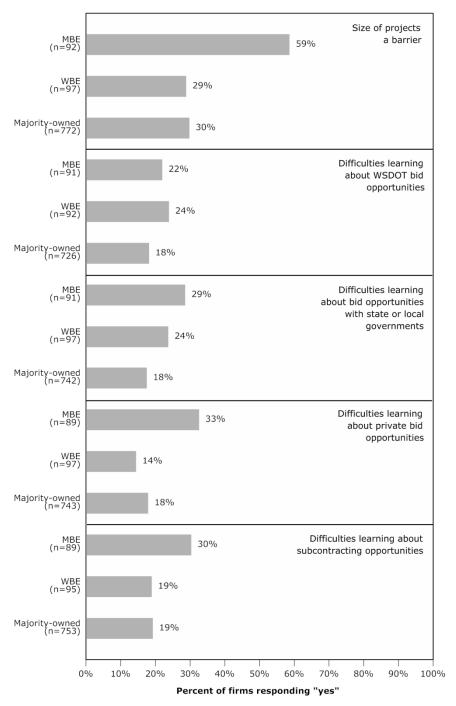
Potential Barriers to Starting or Expanding Businesses

As part of the availability interviews with Washington businesses completed in the disparity study, the study team asked firm owners and managers 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 WSDOT;
- The firm had experienced difficulties learning about bid opportunities with local governments or private companies in Washington; and
- The firm had experienced difficulties learning about subcontracting opportunities in Washington.

Figure H-34 summarizes responses to those questions.

Figure H-34.
Responses to 2012 availability interview questions from Washington MBE, WBE, and majority-owned 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.

Responses for construction and engineering businesses have been combined. As shown in Figure H-34, MBEs were more likely than WBEs and majority-owned businesses to report that the size of projects had been a barrier to bidding. MBEs were also more likely than majority-owned businesses to report difficulties associated with learning about:

- WSDOT bid opportunities;
- Local government bid opportunities;
- Private sector bid opportunities; and
- Subcontracting opportunities.

WBEs were more likely than majority-owned businesses to report difficulties learning about bid opportunities with WSDOT and other state or local governments.

The study team also examined how barriers and difficulties associated with starting or expanding a business affected younger businesses, those that are ten years old or younger. Figure H-35 shows that a larger percentage of younger MBEs and majority-owned businesses were more likely than all firms to report that the size of projects and difficulties leaning about bid opportunities were barriers to bidding.

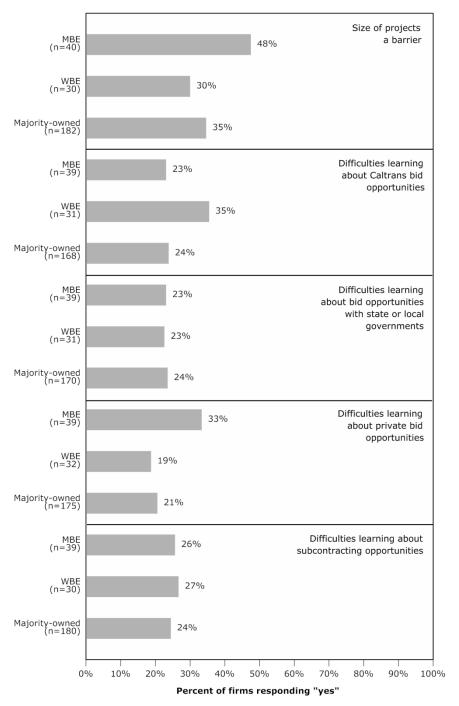
Overall, younger businesses were much more likely than all businesses considered together to report difficulties learning about bid opportunities with WSDOT and within the private sector. Compared to all WBEs, a substantially larger percentage of young WBEs reported difficulties learning about bid opportunities with WSDOT.

Summary

BBC used the 2010 SBA study of minority business dynamics to examine business closures, expansions, and contractions. That study found that, between 2002 and 2006, 29 percent of non-publicly held U.S. businesses had expanded their employment, 24 percent had contracted their employment, and 30 percent had closed. In Washington:

- African American-owned businesses were more likely than white-owned businesses and other businesses to close. African American-owned businesses were less likely than other businesses to expand.
- Hispanic American-owned businesses were also more likely than white-owned businesses to close. However, Hispanic American-owned businesses were slightly more likely to expand than white-owned businesses.
- Overall, minority-owned businesses were less likely to contract than white-owned businesses.

Figure H-35.
Responses to 2012 availability interview questions from Washington
MBE, WBE, and majority-owned construction and engineering firms (young 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.

BBC examined several different datasets to analyze business receipts and earnings for businesses in Washington.

- Analysis of 2007 data indicated that, in Washington, average receipts for African American-, Asian American-, Hispanic American-, Native Hawaiian-, and women-owned businesses were lower compared to those of all businesses in the construction industry.
- Those data also indicated that, in Washington, average receipts for all minority- and women-owned businesses were lower compared to those of all businesses in the professional, scientific, and technical services industry.
- Regression analyses using Census data for business owner earnings indicated that there were statistically significant effects of race/ethnicity and gender on business earnings, after statistically controlling for certain race- and gender-neutral factors:
 - ➤ Being female was associated with lower business earnings in the Washington construction industry and the U.S. engineering industry in 1999 and 2007-2010;
 - ➤ Being African American or Native American was associated with lower business earnings in the U.S. engineering industry in 1999; and
 - ➤ Being Hispanic American was associated with higher business earnings in the U.S. engineering industry in 2007-2010.
- BBC also analyzed revenue data for businesses in the Washington transportation contracting industry collected as part of the disparity study's availability interviews.
 - ➤ A larger percentage of MBE/WBE construction businesses than majority-owned construction businesses reported annual revenue of \$1 million or less.
 - Compared to majority-owned businesses, fewer minority- and women-owned businesses earn high levels of revenue. That result is evident for both the construction and engineering industries.

APPENDIX I. Description of Data Sources for Marketplace Analyses

To perform the quantitative marketplace analyses presented in Appendices E through H, BBC used data from a range of sources, including:

- U.S. Census Bureau PUMS from the 1980 and 2000 Census;
- U.S. Census Bureau PUMS from the 2008-2010 three-year ACS;
- The Federal Reserve Board's 1998 and 2003 SSBFs;
- The 2007 SBO, conducted by the U.S. Census Bureau; and
- HMDA data provided by the FFIEC.

The following sections provide further detail about each data source, including how the study team used it in its analyses.

PUMS Data

Focusing on the construction and engineering industries, BBC 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 the 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., racial/ethnic and occupational groups).

BBC obtained selected Census and ACS data from the Minnesota Population Center's Integrated Public Use Microdata Series (IPUMS). The IPUMS program provides online access to customized, accurate datasets. For the analyses contained in this report, BBC used the 1980 and 2000 Census 5 percent samples and the 2008-2010 ACS 1 percent and 3 percent samples.

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, 2011.

2000 Census data. The 2000 U.S. Census 5 percent sample contains 14,081,466 observations. When applying the Census person-level population weights, the sample represents 281,421,906 people in the United States. The 2000 Washington sub-sample contains 296,440 individual observations, weighted to represent 5,894,780 people.

Categorizing individual race/ethnicity groups. 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 Hispanics (based on the HISPAN variable) were considered Hispanic American, regardless of any other race/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 used a rank ordering methodology similar to that used in the 2000 Census data dictionary. An individual who identified multiple races was placed in the reported race category with the highest ranking in BBC's ordering. African American was first, followed by Native American, Asian-Pacific American, and then Subcontinent Asian American. For example, if an individual identified himself or herself as "Korean," the study team placed that person in the Asian-Pacific American category. If the individual identified himself or herself as "Korean" in combination with "Black," the study team considered that individual as African American.

- The Asian-Pacific American category included the following race/ethnicity groups: Cambodian, Chamorro, Chinese, Filipino, Guamanian, Hmong, Indonesian, Japanese, Korean, Laotian, Malaysian, Native Hawaiian, Samoan, Taiwanese, Thai, Tongan, and Vietnamese. The category also included other Polynesian, Melanesian, and Micronesian races, as well as individuals identified as Pacific Islanders.
- The Subcontinent Asian American category included the following race/ethnicity groups: Asian Indian (Hindu), Bangladeshi, Pakistani, and Sri Lankan. Individuals who identified themselves as "Asian," but were not clearly categorized as Subcontinent Asian were placed in the Asian-Pacific American group.
- The Native American category included the following race/ethnicity groups: American Indian, Alaska Native, and Latin American Indian.

■ If an individual was identified with any of the above groups and an "other race" group, the individual was categorized into the known category. Individuals identified as "other race" or "white and other race" were categorized as "other minority."

For some analyses — those in which sample sizes were small — BBC combined minority groups.

Business ownership. BBC used the Census detailed "class of worker" variable (CLASSWKD) to determine self-employment (i.e., business ownership). The study team classified individuals 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 being self-employed — either for an incorporated or a non-incorporated business — as business owners.

Study industries. The marketplace analyses focused on two industries: construction and engineering services. BBC used the IND variable to identify individuals as working in one or the other industry. That variable includes several hundred industry and sub-industry categories. Figure I-1 identifies the IND codes used to define each study area for the 2000 Census analyses.

Figure I-1.
2000 Census industry codes used for construction and engineering-related services

Study industry	2000 Census IND codes	Description
Construction	77	Construction industry
Engineering-related services	729	Architectural, engineering and related services

Source: BBC Research & Consulting from the IPUMS program: http://usa.ipums.org/usa/.

Industry occupations. BBC also examined workers by occupation within the construction industry using the PUMS variable OCC. Figure I-2 summarizes the 2000 Census (and 2008-2010 ACS) OCC codes that the study team used in its analyses.

Figure I-2.
2000 Census and 2008-2010 ACS occupation codes used to classify workers in construction

Census 2000 and 2008-2010 ACS occupational title and code	Job description
Construction managers 22	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	Directly supervise and coordinate the activities of construction or extraction workers.
Brickmasons, Blockmasons and Stonemasons 622	Lay and bind building materials, such as brick, structural tile, concrete block, cinder block, glass block, and terra-cotta block, Construct or repair walls, partitions, arches, sewers, and other structures. Build stone structures, such as piers, walls, and abutments and lay walks, curbstones, or special types of masonry for vats, tanks, and floors.
Carpenters 623	Construct, erect, install, or repair structures and fixtures made of wood, such as concrete forms, building frameworks, including partitions, joists, studding, rafters, wood stairways, window and door frames, and hardwood floors.
Carpet, floor, and tile installers and finishers 624	Apply shock-absorbing, sound-deadening, or decorative coverings to floors. Lay carpet on floors and install padding and trim flooring materials. Scrape and sand wooden floors to smooth surfaces, apply coats of finish. Apply hard tile, marble, wood tile, walls, floors, ceilings, and roof decks.

Figure I-2 (continued). 2000 Census and 2008-2010 ACS occupation codes used to examine workers in construction

Census 2000 and 2008-2010 ACS occupational title and code	Job description
Cement masons, concrete finishers and terrazzo workers 625	Smooth and finish surfaces of poured concrete, such as floors, walks, sidewalks, or curbs using a variety of hand and power tools. Align forms for sidewalks, curbs or gutters; patch voids; use saws to cut expansion joints. Terrazzo workers apply a mixture of cement, sand, pigment or marble chips to floors, stairways, and cabinet fixtures.
Construction laborers 626	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."
Paving, surfacing and tamping equipment operators	Operate equipment used for applying concrete, asphalt, or other materials to road beds, parking lots, or airport runways and taxiways, or equipment used for tamping gravel, dirt, or other materials. Include concrete and asphalt paving machine operators, form tampers, tamping machine operators, and stone spreader operators.
Miscellaneous construction equipment operators, including pile-driver operators 632	Operate one or several types of power construction equipment, such as motor graders, bulldozers, scrapers, compressors, pumps, derricks, shovels, tractors, or frontend loaders to excavate, move, and grade earth, erect structures, or pour concrete or other hard surface pavement. Operate pile drivers mounted on skids, barges, crawler treads, or locomotive cranes to drive pilings for retaining walls, bulkheads, and foundations of structures, such as buildings, bridges, and piers.
Drywall installers, ceiling tile installers and tapers 633	Apply plasterboard or other wallboard to ceilings or interior walls of buildings, mount acoustical tiles or blocks, strips, or sheets of shock-absorbing materials to ceilings and walls of buildings to reduce or reflect sound.
Electricians 635	Install, maintain, and repair electrical wiring, equipment, and fixtures. Ensure that work is in accordance with relevant codes. May install or service street lights, intercom systems, or electrical control systems. Exclude "Security and Fire Alarm Systems Installers." The 2000 category includes electrician apprentices.

Figure I-2 (continued). 2000 Census and 2008-2010 ACS occupation codes used to examine workers in construction

Census 2000 and 2008-2010 ACS occupational title and code	Job description
Glaziers 636	Install glass in windows, skylights, store fronts, display cases, building fronts, interior walls, ceilings, and tabletops.
Painters, construction and maintenance 642	Paint walls, equipment, buildings, bridges, and other structural surfaces, using brushes, rollers, and spray guns. Remove old paint to prepare surfaces prior to painting and mix colors or oils to obtain desired color or consistency.
Pipelayers, plumbers, pipefitters and steamfitters 644	Lay pipe for storm or sanitation sewers, drains, and water mains. Perform any combination of the following tasks: grade trenches or culverts, position pipe, or seal joints. Excludes "Welders, Cutters, Solderers, and Brazers." Assemble, install, alter, and repair pipelines or pipe systems that carry water, steam, air, or other liquids or gases. May install heating and cooling equipment and mechanical control systems. Includes sprinklerfitters.
Plasterers and stucco masons 646	Apply interior or exterior plaster, cement, stucco, or similar materials and set ornamental plaster.
Roofers 651	Cover roofs of structures with shingles, slate, asphalt, aluminum, and wood. Spray roofs, sidings, and walls with material to bind, seal, insulate, or soundproof sections of structures
Iron and steel workers, including reinforcing iron and rebar workers 653	Iron and steel workers raise, place, and unite iron or steel girders, columns, and other structural members to form completed structures or structural frameworks. May erect metal storage tanks and assemble prefabricated metal buildings. Reinforcing iron and rebar workers position and secure steel bars or mesh in concrete forms in order to reinforce concrete. Use a variety of fasteners, rod-bending machines, blowtorches, and hand tools. Include rod busters.
Helpers, construction trades 660	All construction trades helpers not listed separately.

Figure I-2 (continued).
2000 Census and 2008-2010 ACS occupation codes used to examine workers in construction

Census 2000 and 2008-2010 ACS occupational title and code	Job description
Driver/sales workers and truck drivers 913	Driver/sales workers drive trucks or other vehicles over established routes or within an established territory and sell goods, such as food products, including restaurant takeout items, or pick up and deliver items, such as laundry. May also take orders and collect payments. Include newspaper delivery drivers. Truck drivers (heavy) drive a tractor-trailer combination or a truck with a capacity of at least 26,000 GVW, to transport and deliver goods, livestock, or materials in liquid, loose, or packaged form. May be required to unload truck. May require use of automated routing equipment. Requires commercial drivers' license. Truck drivers (light) drive a truck or van with a capacity of under 26,000 GVW, primarily to deliver or pick up merchandise or to deliver packages within a specified area. May require use of automatic routing or location software. May load and unload truck. Exclude "Couriers and Messengers."
Crane and tower operators 951	Operate mechanical boom and cable or tower and cable equipment to lift and move materials, machines, or products in many directions. Exclude "Excavating and Loading Machine and Dragline Operators."
Dredge, excavating and loading machine operators 952	Dredge operators operate dredge to remove sand, gravel, or other materials from lakes, rivers, or streams; and to excavate and maintain navigable channels in waterways. Excavating and loading machine and dragline operators Operate or tend machinery equipped with scoops, shovels, or buckets, to excavate and load loose materials. Loading machine operators, underground mining, Operate underground loading machine to load coal, ore, or rock into shuttle or mine car or onto conveyors. Loading equipment may include power shovels, hoisting engines equipped with cabledrawn scraper or scoop, or machines equipped with gathering arms and conveyor.

Source: 2000 Census occupational titles and codes at http://usa.ipums.org/usa/volii/00occup.shtml, 1980, job descriptions from the Bureau of Labor Statistics www.bls.gov.

Education variables. BBC used the variable indicating respondents' highest level of educational attainment (EDUCD) to classify individuals into four categories:²

- Less than high school;
- High school diploma;
- Some college or associate's degree; and
- At least a bachelor's degree.

² In the 1940-1980 samples, respondents were classified according to the highest year of school completed (HIGRADE). In the years after 1980, that 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 EDUCD variable merges two different schemes for measuring educational attainment by assigning to each degree the typical number of years it takes to earn it.

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 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 five percent sample includes 11,343,120 observations weighted to represent 226,862,400 people. The sample includes 206,908 observations in Washington, weighted to represent 4,138,160 individuals. A number of changes in variables and coding took place between the 1980 and 2000 Censuses.

Changes in race/ethnicity categories between censuses. Figure I-3 lists the seven BBC-defined racial/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 U.S. Census Bureau 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, data analysts do 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 Census years with respect to race/ethnicity. Despite those issues, 98 percent of survey respondents in 2000 indicated a single race.³

Business ownership. BBC uses the Census "class of worker" variable (CLASSWKD) to determine self-employment. That variable was the same for 1980 and 2000 with one exception — the 1980 variable did 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 Census definitions of some industries and sub-industries changed between 1980 and 2000. As a result, the 1980 codes for the industry variable (IND) were not the same as the 2000 IND codes in all cases. However, for the construction and engineering industries, the 1980 codes corresponded directly to equivalent 2000 codes.

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³ Grieco, Elizabeth M. & Rachel C. Cassidy. "Overview of Race and Hispanic Origin," Census 2000 Brief, March 2001, page 3.

Figure I-3.
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, 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, 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 or Native Hawaiian, identified alone or in combination with any non-Hispanic, non-Black group	Hispanic origin: no Race: American Indian/Alaska Native or Native Hawaiian
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: BBC Research & Consulting from the IPUMS program: http://usa.ipums.org/usa/.

Geographic variables. For the analyses presented in the marketplace appendices, there were no substantial changes in geographic variables between then 1980 and 2000 Censuses. BBC used the same variable available for 2000 Census data to identify Washington (STATEFIP) as in the 1980 data.

Changes in educational variables between Censuses. The 1980 Census PUMS data included 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.⁴

2008-2010 ACS data. BBC also examined 2008-2010 ACS data from IPUMS. The U.S. Census Bureau conducts the ACS which uses monthly samples to produce annually updated data for the same small areas as the 2000 Census long-form.⁵ 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). The 2008-2010 ACS three-year estimates represent the average characteristics over the three-year period of time.

For national calculations, BBC used the 1 percent ACS sample, and for state calculations BBC used the 3 percent ACS sample. Applying the person-level population weights to the 3,033,841 observations included in the data, the 2008-2010 ACS dataset represents 307,237,302 people in the U.S. For Washington, the 2008-2010 ACS dataset includes 199,181 observations representing 6,658,052 individuals. With the exception of a few minor differences, the variables available for the 2008-2010 ACS dataset are the same as those available for the 2000 Census 5 percent sample.

Changes in race/ethnicity categories between 2000 Census and 2008-2010 ACS data. The 2000 Census 5 percent sample and the 2008-2010 ACS PUMS data use essentially the same numerical categories for the detailed race variable (RACED). However, in both samples, any category representing 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. That issue is likely to affect only a very small number of observations. PUMS race/ethnicity categories that were available in 2000 but not in 2008 through 2010 (or vice versa) represented a very small percentage of the 2000 and 2008 through 2010 populations. Categories for the Hispanic variable (HISPAN) remained consistent between the two datasets.

Other variables. Other variables that BBC used from the 2008-2010 ACS did not change between 2000 and 2008 through 2010. The variables CLASSWKD, LABFORCE, IND, OCC, PUMA, and EDUCD were consistent between datasets, with variable codes in each case representing the same categories.

⁴ For a more detailed explanation, see footnote 2.

⁵ 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

SSBF

The study team used the SSBF to analyze the availability and characteristics of small business loans. The SSBF, which the Federal Reserve Board conducts every five years, collects financial data from non-governmental for-profit businesses with fewer than 500 employees. The survey uses a nationally representative sample, structured to allow for analysis of specific geographic regions, industry sectors, and racial and gender groups. The SSBF is unique as it provides detailed data on both business and owner financial characteristics. For the purposes of the study team's analyses, BBC used the surveys from 1998 and 2003, which are available at the Federal Reserve Board website.

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.

Categorizing owner race/ethnicity and gender. Definition of race/ethnicity groups in the 1998 SSBF are slightly different than the classifications used in the 2000 Census and 2008-2010 ACS. In the SSBF, businesses are classified into the following five groups:

- Non-Hispanic white;
- Hispanic American;
- African American;
- Asian American;
- Native American; and
- Other (unspecified).

A business was considered Hispanic American-owned if more than 50 percent of the business was owned by Hispanic Americans, regardless of race. All businesses that reported 50 percent or less Hispanic American ownership were included in the racial group that owned more than half of the company. No businesses reported the race/ethnicity of their owners as being "other." As with race, the study team classified businesses as female-owned if more than 50 percent of the business was owned by women. Businesses owned half by women and half by men were classified as male-owned.

Defining selected industry sectors. In the 1998 SSBF, each business was classified according to SIC codes and placed into one of eight industry categories:

- Construction;
- Mining;
- Transportation, communications, and utilities;
- Finance, insurance, and real estate;

⁶ 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/.

- Trade;
- Engineering;
- Services (excluding engineering); or
- Agriculture, forestry, and fishing.

Region variables. The SSBF divides the United States into nine Census Divisions. Along with Alaska, California, Oregon, and Hawaii, Washington is included in the Pacific Census Division (referred to in marketplace appendices as the Pacific region).

Loan denial variables. In the 1998 survey, business 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 the study team's analyses, only businesses that were always denied were considered when analyzing loan denial.

Data for 2003. The 2003 SSBF differs from previous SSBFs in terms of the population surveyed, the variables available, and the 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 businesses, but in 2003, minority-owned businesses were not oversampled. In the 1998 data, 7.3 percent of the survey businesses were owned by Hispanic Americans, but that number dropped to 4 percent in the 2003 data. Representation in the sample also dropped for African American-owned businesses (7.7% to 2.8%) and Asian American-owned businesses (5.7% to 4.2%). The smaller sample sizes for minority groups in the 2003 SSBF affects the ability to conduct analyses related to differences in loan application outcomes for specific race/ethnic 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 included a fourth variable that is a weighted average of other answers that businesses provided for each question. In order to define race/ethnicity and gender variables consistently for the 1998 to 2003 surveys, BBC used the final weighted average for variables on owner characteristics. The study team then divided businesses into race/ethnicity, and gender groups according to the same guidelines used for the 1998 data.

The study team defined industry, region, and loan denial variables for the 2003 survey using the same guidelines as the 1998 survey, with one exception — the 2003 survey did not include any businesses 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. 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 businesses surveyed. However, the 2003 data includes five implicates, each with

imputed values that have been filled in using a randomized regression model.⁷ Thus, there are 21,200 observations in the 2003 data, five for each of the 4,240 firms surveyed. Across the five implicates, all non-missing values are identical, whereas imputed values may differ. Therefore, in both data sets, when a business answered a survey question, the response was not altered. However, the method for filling in missing values differed between surveys.

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. Those problems can be corrected through the 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.

Multiple implicates were not provided with the 1998 data, making the method of analysis used for the 2003 data inapplicable. To address that issue, the study team performed analysis in two different ways — first, only with observations whose data were not imputed, and second, with all observations. Differences in results were not significant. 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 loan the dependent variable, loan denial.

SBO

BBC used data from the 2007 SBO to analyze mean annual firm receipts. The U.S. Census Bureau conducts the SBO every five years. The U.S. Census Bureau collected data for the most recent publication of the SBO in 2007. 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 and nonprofits were eligible to be surveyed, including businesses with and without paid employees. In 2007, almost 8 million businesses were surveyed. BBC examined SBO data relating to the number of businesses, number of businesses with paid employees, and total receipts. That information is available by geographic location, industry, gender, and race/ethnicity.

The SBO uses the 2002 North American Industry Classification System (NAICS) to classify industries. BBC analyzed data for businesses in all industries and for businesses in selected industries that corresponded closely to construction and engineering-related services.

To categorize the business ownership of businesses reported in the SBO, the Census Bureau uses standard definitions for women-owned and minority-owned businesses. A business is defined as female-owned if more than half of the ownership and control is by women. Businesses with joint male/female ownership were tabulated as an independent gender category. A business is defined as minority-owned if more than half of the ownership and control is by African

⁷ For a more detailed explanation of imputation methods, see the "Technical Codebook" for the *2003 Survey of Small Business Finances*

⁸ 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

Americans, Asian Americans, Hispanic Americans, Native Americans, or by another minority group. Respondents had the option of selecting one or more racial groups when reporting business ownership. BBC reported business receipts for the following race/ethnicity and gender groups:

- African Americans:
- Asian Americans:
- Hispanic Americans;
- Native Americans:
- Non-Hispanic whites;
- Men; and
- Women.

HMDA Data

BBC analyzed mortgage lending in Washington and in the nation using HMDA data that the FFIEC provides. HMDA data provide information on mortgage loan applications that financial institutions, savings banks, credit unions, and some mortgage companies receive. Those data include information about the location, dollar amount, and types of loans made, as well as race/ethnicity, income, and credit characteristics of loan applicants. Data are available for home purchase, home improvement, and refinance loans.

Financial institutions were required to report 2010 HMDA data if they had assets of more than \$39 million (\$35 million for 2006), had a branch office in a metropolitan area, and originated at least one home purchase or refinance loan in the reporting calendar year. Mortgage companies were 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, were located in an MSA (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.

BBC used those data to examine loan denial rates and subprime lending rates for different racial/ethnic groups in 2006, 2009, and 2010. Note that the HMDA data represent the entirety of home mortgage loan applications reported by participating financial institutions in each year examined. Those data are not a sample. However, BBC did not report loan denial rates or subprime lending rates in cases where there were fewer than 25 loans in a particular category. Appendix G provides a detailed explanation of the methodology that the study team used for measuring loan denial and subprime lending rates.

APPENDIX J. Qualitative Information from Personal Interviews, Public Hearings, and Other Meetings

Appendix J presents qualitative information that BBC collected as part of in-depth personal interviews, public hearings, and other meetings that the study team conducted as part of the disparity study. Appendix J is presented in 10 parts:

- **A. Introduction and Background** describes with whom the study team met to collect the information summarized in Appendix J and how that information was collected. (page 2)
- B. Background on the Transportation Contracting Industry in Washington summarizes information about how businesses become established and how companies change over time. Part B also presents information about the effects of the economic downturn and business owners' experiences pursing public and private sector work. (page 3)
- **C. Doing Business as a Prime Contractor or as a Subcontractor** summarizes information about the mix of businesses' prime contract and subcontract work and how they obtain that work. (page 20)
- **D. Keys to Business Success** summarizes information about certain barriers to doing business and keys to success, including access to financing, bonding, and insurance (page 37)
- **E. Potential Barriers to Doing Business with Public Agencies** presents information about potential barriers to doing work for public agencies, including WSDOT. (page 49)
- **F. Allegations of Unfair Treatment** presents information about experiences with unfair treatment including bid shopping, treatment during performance of work, and allegations of unfavorable work environment for minorities and women. (page 86)
- G. Additional Information Regarding any Racial/ethnic- or Gender-based Discrimination includes additional information concerning potential racial/ethnic- or gender-based discrimination. Topics include stereotypical attitudes about minorities and women and allegations of a "good ol' boy" network that adversely affects opportunities for MBE/WBEs. (page 98)
- **H. Insights Regarding Neutral Measures** presents information about business assistance programs, efforts to open contracting processes and other steps to remove barriers to all businesses or small business. (page 104)
- I. Insights Regarding Race-/ethnicity- or Gender-based Measures presents information about general comments about the Federal DBE Program, effects of I-200, and allegations of fraud concerning DBE certification. (page 129)
- **J. DBE and other Certification Processes** presents information about the DBE certification process. It also presents information about advantages and disadvantages that subcontractors experience because of their certification as a DBE or MBE/WBE/SBE. In

addition, Part J also presents information about false reporting of DBE/MBE/WBE participation and falsifying good faith efforts. (*Page 144*)

A. Introduction and Background

The BBC study team conducted in-depth personal interviews, public hearings, and other meetings throughout 2012. During the interviews, hearings, and meetings, participants had the opportunity to discuss their experiences working in the local transportation contracting industry; experiences working with WSDOT and other public agencies; and perceptions of the Federal DBE Program.

In-depth personal interviews. The study team conducted in-depth personal interviews with 38 Washington businesses and two trade association representatives. The interviews included discussions about interviewees' perceptions and anecdotes regarding the local transportation contracting industry; the Federal DBE Program; and the contracting and procurement policies, practices, and procedures of WSDOT. BBC and PCC conducted all of the interviews.

Interviewees included individuals representing construction businesses, engineers businesses, and trade associations. The study team identified interview participants primarily from a random sample of businesses that was stratified by business type, location, and the race/ethnicity and gender of business owner. The study team conducted most of the interviews with the owner, president, chief executive officer, or other officer of the business or association. Of the businesses that the study team interviewed, some work exclusively or primarily as prime contractors or subcontractors, and some work as both. All of the businesses conducted work in Washington. All interviewees are identified in Appendix J by random interviewee numbers (i.e., #1, #2, #3, etc.).

Interviewees were often quite specific in their comments. As a result, in many cases, the study team has reported them in more general form to minimize the chance that readers could identify interviewees or other individuals or businesses that were mentioned in the interviews. The study team reports whether each interviewee represents a DBE-certified business and also reports the race/ethnicity and gender of the business owner.¹

Information from public hearings. As part of the disparity study, WSDOT and the study team conducted five public hearings through the state. The public hearings were conducted in:

- North Seattle (February 15, 2012; comments identified with the prefix "NSP");
- South Seattle (February 23, 2012; comments identified with the prefix "SSP");
- Spokane (February 16, 2012; comments identified with the prefix "SKP");
- Vancouver (February 22, 2012; comments identified with the prefix "VNP"); and
- Yakima (February 21, 2012; comments identified with the prefix "YKP").

The numbering of comments for a particular public hearing (e.g., # NSP 1, # NSP 2) pertains to the order in which participants gave testimony at the hearing.

¹ Note that "male" or "white" are sometimes not included as identifiers to simplify the written descriptions of business owners.

Trade association meetings. The study team also participated in meetings with the Associated General Contractors of America and DBE Practioners within the state.Both the Associated General Contractors of America meeting and the DBE Practioners meeting provided opportunities for participants to discuss their experiences working in the local transportation contracting industry; experiences working with WSDOT and other public agencies; and perceptions of the Federal DBE Program. Comments that participants made in those meetings appear throughout Appendix J and are identified by the prefixes "AGC" and "DBEP" for the Associated General Contractors of America meeting and the DBE Practioners meeting, respectively.

Written testimony. The study team and WSDOT encouraged business owners and others were encouraged to submit written comments and testimony throughout the study process. The Appendix includes written testimony from 12 individuals. Those comments appear throughout Appendix I and are identified by the prefix "WT."

B. Background on the Transportation Contracting Industry in Washington

Part B summarizes information related to:

- How businesses become established (page 3);
- Changes in types of work that businesses perform (page 5);
- Fluid employment size of businesses (*page 6*);
- Flexibility of businesses to perform different types and sizes of contracts in different parts of the state (page 7);
- Local effects of the economic downturn (page 9);
- Current economic conditions (page 13); and
- Business owners' experiences pursing public and private sector work (page 13).

How businesses become established. Most interviewees representing construction and engineering businesses reported that their companies were started (or purchased) by individuals with connections in their respective industries.

Many firm owners worked in the industry before starting their own businesses. Examples from the in-depth interviews include the following:

- The Asian American owner of a DBE-certified construction company said that he had worked for many years in the field before starting his company. [WT#2]
- The white male representative of a woman-owned, non-certified construction company stated that he and his wife decided to start their own business after he received unfair treatment as an employee at another company. At that time he had 15 or 16 years of experience in construction. [#34]
- The white male owner of a specialty contracting company was working in a constructionrelated job in Oregon when a businessman from Washington State suggested that there was

- a need for his skills in that state. That conversation eventually led to the formation of this company. [#20]
- The female Asian American principal of an Asian American-owned, DBE-certified engineering firm said "[The owner] was working for another engineering company and decided to start his own firm. He thought the idea of 'be[ing] your own boss would be an interesting endeavor. It is a lot of work." [#1]
- The African American owner of an MBE/DBE-certified engineering company was an employee of the company for several years before purchasing the company five years ago. [#8]
- The white female owner of a DBE-certified specialty contracting company reported, "My father was in construction all of his life, so I grew up around construction. When I was 18 years old I went to work for his paving company. Then he retired and I continued on I quit that job and started [my own company]. [#12]
- A male Native American and his white business partner recently purchased a general contracting company. He had about 25 years of construction-related work experience. [#16]
- A white female manager for an MBE/DBE/SBA certified engineering company said, "The current owner ... was with a large engineering firm for perhaps five to ten years before he bought this company." [#9]
- The Pacific Islander owner of a DBE- and SBA 8(a)-certified professional services firm. He said that he worked in the industry for many years before joining the firm that he later purchased. [#37]
- Other interviewees also indicated that their companies were started (or purchased) by individuals with connections in their respective industries. [for example, #17, #26, #3, #19, #22 and #8.]

Multiple interviewees indicated that relationships among family members were instrumental in establishing their construction businesses. Examples of such comments include the following:

- The white female majority owner of a non-certified specialty construction company formed the business in 2005 with her brother after working in construction for her father for many years. [#30]
- The white male general manager of a general contracting company described the company's history, "[The company] started out ... owned by the grandfather [of the current owner], and ... some [of the employees of that company] started a new company owned by the father [of the current owner]. That [company] has transitioned now to the current owner, who bought the company from his father. So it is the third generation." [#33]
- The co-owner of a non-certified concrete company had worked for another family member in a similar type of business, and when that company failed, the individual formed a new company with his wife. [#17]
- A family connection was also instrumental in the decision of the Hispanic American owner of a non-certified construction company to establish his business. [#29]

- The white female CEO and co-owner of a WBE-certified construction company started working at the company founded by her father. She bought the business from him in the early 1990s. [#11]
- The female manager of a Native American-owned, DBE-certified construction company said that her husband, the owner, purchased the company from his father. [#32]
- The female owner of a DBE-certified specialty construction firm explained, "[Starting the company] was my husband's idea. He has been in the construction arena since I met him in 1984." [#27]
- The African American owner of a DBE-certified trucking and specialty contracting company said, "My dad was in the ... industry, and had his own company." He said he "learned to read blueprints and was operating all kinds of equipment" in his father's company before starting his own business. [#36]
- The white male owner of an SBA-certified specialty construction company said, "I got into construction when I got out of high school. My friend's dad had a home building company and allowed me to get some experience running his equipment. Then I just decided to do it on my own." [#25]
- Other interviewees also indicated that relationships among family members were instrumental in establishing their construction businesses. [for example, #17, #26, #19 and #22]

Changes in types of work that businesses perform. Interviewees discussed whether and why firms over time changed the types of work that they perform.

Several interviewees indicated that their companies had changed or expanded their lines of work to respond to market conditions. For example:

- The female co-owner of a non-certified construction company stated that the business began in residential construction and then grew through contacts in state and federal agencies. [#24]
- A representative of a majority-owned specialty contractor noted that the owner she works for was once part of the construction industry and has shifted to another field, liquidating his other company. [#14]
- The white female owner of a DBE-certified specialty contracting company reported that after she started a specialty contracting business, "The company kept getting larger and it started expanding into other areas of work." [#12]
- A manager of a majority-owned construction materials manufacturer stated that the company was established when the founder of the company provided a solution for a problem experienced in another industry and found that their original product was needed on construction sites. Today they are a manufacturer and supplier to that industry. [#23]
- The white female co-owner of a non-certified construction company said, "My husband had a company that was doing concrete cutting. He purchased an excavator and [the general construction company] started to grow. [The company] moved into public work doing water mains, sewer lines, site work." She explained, "[The company] does excavating, utility installation, site work, road building, and general civil dirt work. [#31]

■ The general manager of a woman-owned, DBE-certified specialty contracting company explained that the company has diversified to offer broader services and products related to its core business. [#18]

Some interviewees explained that perceived incentives for MBE/WBEs was one factor that encouraged starting those businesses. [for example, #17, #26]

Fluid employment size of businesses. The study team asked business owners about the number of people that they employed and whether their employment size fluctuated.

A number of companies reported that they expand and contract their employment size depending on work opportunities, season, or market conditions. Examples of those comments include the following:

- A representative of a majority-owned specialty contractor reported that the business had three full-time employees and used as many as 65 part-time employees on an on-call basis. The firm representative reported that the firm's business was very seasonal. [#14]
- The white female owner of a DBE-certified specialty contracting company reported, "The [company] has 12 full-time employees and 150 to 200 seasonal employees." [#12]
- A representative of another construction company said that her firm had 10 employees in its core group and 40 to 50 part-time workers, "some working only a day here and there." She reported that their work is very seasonal. [#19]
- A minority female co-owner of a construction company said, "[The company] hires employees on a per-job basis. Sometimes [the company] has as many as eight employees. [The company] draws from a pool of workers we know. The people used don't need much experience. Sometimes day labor is used." [#28]
- The general manager of a woman-owned, DBE-certified specialty contracting company detailed, "In the peak of summer, [the company has] 130 to 150 employees. That runs on a seven or eight month schedule. Then, the [number of employees] drops to 25 [employees] or so during the winter." [#18]
- The African American owner of an MBE/DBE-certified engineering company said that his firm brings on project specific people as needed. [#8]
- The white male general manager of a general contracting company said, "[The company] has 12 to 15 full-time employees. In the summer, it can range up to 50 to 75 seasonal employees." [#33]
- The Pacific Islander owner of a DBE-certified engineering and specialty construction company said, "[The firm] has eight full time employees, and two part-time employees. For construction [-related work, the number of people hired] depends on the projects. Construction employees come from Task Force (a labor force provider) or the union hall." [#37]
- Many other business owners and managers explained that number of employees working for their companies at any one time varied depending on the amount of work the company was performing. [for example, #1, #5, #17, #26, #31, #32]

Some interviewees said that they had reduced permanent staff because of poor market conditions. For example:

- The Asian-Pacific American owner of a DBE-certified engineering firm said that he had 18 full-time employees a few years ago and now his staff is down to five full-time and three part-time employees. He said, "Growth depends on what markets a firm chooses to be in and what markets [it would] like to be in but can't break in." [#3]
- The African American owner of a DBE-certified trucking and specialty contracting company reported, "[The company] is down to three full-time employees right now. The most [it] has ever had is 90 employees." [#36]
- Managers of a Native American-owned, DBE-certified engineering firm reported that the firm varied in size depending on volume of work. They reported that the firm had reduced its full-time employees by one-third in the past few years. They also indicated that their firm responded quickly to new work opportunities. "It started out as a very small company, but one project can bump a company up pretty fast." [#6]
- The white male owner of a SBA-certified specialty construction company said, "Right now, [the company] has only two employees my wife and me. In the past, and before these tough economic times, [it] has had up to ten employees. [#25]

Flexibility of businesses to perform different types and sizes of contracts in different parts of the state. Interviewees discussed types, locations, and sizes of contracts that their firms perform.

Many firm owners reported flexibility in the locations and sizes of contracts that their firms perform.

- Many firm owners reported working state-wide. [for example, #18, #32, #6].
- A few firm owners reported working in Washington and other states. [for example, #26, #3, #30]
- A number of firm owners reported working throughout Western Washington [for example, #14 and #19] and others primarily in Eastern Washington [for example #12].

Examples of specific comments include the following:

- The white male owner of a specialty contracting company reported, "[My services] are available from the Canadian border to Battle Ground from Clallam County on the Pacific Coast to Moses Lake in Central Washington." [#20]
- The white male owner of an SBA-certified specialty construction company said his company will perform work from Orville to Yakima. [#21]
- The Asian-Pacific American owner of a DBE -certified engineering firm said, "There is a saying for firms like [my firm] that do all types of work 'We go where the money is.'" [#3]

Other companies said that they prefer to perform projects close to their businesses, but will travel to worksites when necessary. For example:

- The female owner of a DBE-certified specialty construction firm said, "If I had my preference, [the company] would provide services from Federal Way to Olympia. But to get started and employ the number of people I want to employ, [it] had to spread [its] footprint out." She said her firm works throughout western Washington. [#27]
- According to the Native American co-owner of a construction company, "[The company] will travel about 30 to 40 miles for work, but will go anywhere if the customer pays for mileage." [#16]
- The white male representative of a woman-owned, non-certified construction company reported that his company has worked jobs in Western Washington, but "...would do work in Eastern Washington if the job was correct." However, he said, "It would be hard to market in different areas in the state. For one, [it would be working] in an area that I don't know, and there is competition over there, also. So I'd be shooting myself in the foot to do that. I'd much rather concentrate my [company's] area here, and stay closer to home." [#34]

Some firm owners indicated that their companies perform both small and large contracts. For example:

- The female owner of a DBE-certified construction company said that her company works on contracts anywhere from \$50,000 to \$8.5 million in value. [#40]
- The general manager of a woman-owned, DBE-certified specialty contracting company stated, "[The company] does contracts as small as \$500 ... to as large as \$3 million" [#18]
- The white female co-owner of a non-certified construction company said that her company now does contracts ranging from \$5,000 to \$3 million. [#31]
- The Pacific Islander owner of a DBE-certified engineering and specialty construction company reported, "A small contract [for my firm] would be \$500 ... a large contract would be \$1.5-\$2 million." [#37]
- Many other interviewees, including minority and female business owners, said they perform contracts from very small projects up to \$1 million or more. [for example, #6, #17, #26, #27, #36]

Some business owners noted that their financial resources affected how large of contracts on which they typically bid:

- The female manager of a Native American-owned, DBE-certified construction company said, "[The company] will take on contracts from \$30,000 to \$1.5 million. The 'sweet spot' is really about \$50,000 to \$80,000. ... We are more selective today about what [the company] bids on than two or three years ago. We found it wasn't good to decide to bid a job and think [the company] would find the money to do the job later." [#32]
- The Hispanic American owner of a DBE-certified engineering firm reported that his company pursues contracts from \$80,000 to \$500,000. He said that the company does not currently have financial resources or facilities to support larger contracts. [#7]

Other business owners reported that they typically only perform small contracts. For example:

- The Native American co-owner of an uncertified general contracting company said, "Typically, [the company does contracts] on the high end of \$15,000 to \$20,000, and the average is about \$3,000.
- The white male owner of an SBA-certified specialty construction company said his company's federal contracts range from \$3,000 to \$100,000 and private sector contracts average around \$30,000. He said his company also does all kinds of small projects. [#21]
- A representative of a majority-owned, non-certified specialty contractor said that a contract for \$120,000 is considered large for the company. [#14]
- The female majority owner of a non-certified specialty construction company reported, "[The company's] lower end contracts are \$25,000 to \$30,000, up to about \$200,000." [#30]
- The white female CEO and co-owner of a WBE-certified construction company said that the economy had dictated the size of contracts she does. "Since 2008 [our contracts have been small], mostly from \$20,000 to \$50,000. [A contract of] \$100,000 would be big right now." [#11]

Some companies reported that they work in several different fields, or that they had changed primary lines of work over time. For example:

- The African American owner of a DBE-certified trucking and specialty contracting company said that he started by doing hauling for a lot of homebuilders. "I added excavation, demolition, and environmental services to the trucking side of it." [#36]
- Managers of a Native American-owned, DBE-certified engineering firm indicated that their firm performs a broad range of engineering, architectural, planning, and construction administration services. [#6]
- The Hispanic American owner of a DBE-certified engineering firm said that he tries to maintain a diversified practice across types of work and industry segments. [#7]
- Another business owner changed the services he offers to respond to the economic downturn. [#22]
- When asked how his company managed through the last few years, the white male owner of an SBA-certified specialty construction company said that his company branched out to other types of work representing "things that I could find to bid on." [#21]

Local effects of the economic downturn. Interviewees expressed many comments about the economic downturn.

Most interviewees indicated that market conditions since 2008 have made it difficult to stay in business. For example:

■ The female owner of a DBE-certified construction company said that the average DBE does not have the background and training that she does. "But even with all that I have going for me, I'm having a hell of a time just making ends meet in this construction economy where it's tough just getting paid." [#40]

- One interviewee said that her firm (a white woman-owned, DBE-certified construction company) has had declining work over the past three to four years. "These past two years have been very tough." [#19]
- Managers of a Native American-owned, DBE-certified engineering firm said that the slow economy had affected their business, starting about three years ago. [#6]
- The white male general manager of a general contracting company said, "[Current market conditions] stink. And I've heard that the private sector is much worse. There are too many contractors and not enough work." [#33]
- A representative of a majority-owned specialty contractor noted that many companies in the construction industry have gone out of business. [#14]
- The African American owner of an MBE/DBE-certified engineering company said, "A lot of other small firms have not survived, either going out of business or getting absorbed [by a larger firm]." [#8]
- The president of an engineering industry trade association stated that "a very small and continuing-to-diminish" percentage of his organization's membership is made up of minority- or woman-owned businesses, primarily due to "consolidation" (i.e., small firms are getting bought out by larger firms). [#38]
- The female majority owner of a non-certified specialty construction company said, "I heard a rumor that a lot of local companies are thinking about selling or just going out of business. I think a lot of [those companies] are struggling. I think the big ones are able to keep going with the few jobs that are out there. The work just hasn't been available to work on." [#30]

Many business owners and managers said they have seen much more competition during the economic downturn. They reported that more competitors are going after a smaller number of contracts in specific fields, with substantial downward pressure on prices. Larger firms have been bidding on work that typically went to smaller firms. Both construction and engineering companies have been affected. For example:

- A manager of a woman-owned, DBE-certified construction company said, "There are definitely more competitors out there [than there used to be]. The last couple of years have been tough." [#19]
- Representatives of a large publicly-owned concrete company said, "When you look at capacity in this local area, probably any of the companies could supply 100 percent of the capacity. [That's how much the market has declined]." [#15]
- A white female manager for an MBE/DBE/SBA certified engineering company said, "It has become much more challenging in the last couple of years for a smaller size firm like [this one]. On the public side, there's less funding going around. What we see is that [on] small projects, such as \$200,000 ... the larger firms are going for those projects. [Our company] is now competing with those [large firms] and competing on qualifications. If [our company] has done two jobs like the one advertised, the larger firm can say [it] has done 200. There's just more pressure on the market." [#9]
- The female Asian American principal of an Asian American-owned, MBE/DBE-certified engineering company also sees more competition. "There's a lot more competition [than

- there used to be]. [A company might] apply for things [it] has no background in, no experience in. [It is] just throwing [its] hat out there to see if [it] can win something." [#1]
- The African American owner of an MBE/DBE-certified engineering company said, "The last couple of years have been really bad. Essentially, there hasn't been a whole lot of work on the municipal side coming out. ... For the last two and one-half years, [on] projects that [my firm] could do, that were small projects, ... people [would] show up to these pre-proposal meetings and were sitting there [next to people from] global firms. So the competition for the few projects that have come out has been fierce." [#8]
- When asked what it takes to be competitive in this market, the female manager of a Native American-owned, DBE-certified construction company said, "The bigger the company, the lower [its] prices can be. There are some companies that are really hungry, and [some] are ignorant to the realities of the business. [A company like this might bid very low and] get the job, but [it] is out of business in a year or two and [can] mess it up for [properly run businesses]." [#32]
- The white male owner of a new construction company said, "I think [the marketplace] is highly competitive. I think right at the moment [companies] are willing to work for way less than has normally been the case. I think there is just a lot more competition for any given bid than normal." [#13]
- The Asian-Pacific American owner of a DBE-certified engineering company said, "Right now, in the private sector, it is almost a bidding war for design professionals. That's okay ... because that's the way the economy is right now. Customers are looking for the best bang for the buck. Competition now [is] not just on qualifications but also on price." [#3]

Some business owners said that they scaled back their operations in response to market conditions in order to stay in business. For example:

- The female co-owner of a construction company said that she's seen other construction companies go out of business because of high overhead. When the market turned in 2008, she said, "It was like someone turned a faucet off." As the company's administrator, she looked at every expense. She said, "[The company] moved out of our rented office space in town and my husband built a small office at our home. I looked at every expense. [The company] sold some equipment that wasn't staying busy. By being tough and smart [the company] reduced monthly expenses by \$5,000. That made the difference." [#24]
- The white female CEO and co-owner of a WBE-certified construction company said that her annual revenue went from \$5.5 million down to \$1 million dollars. She noted, "These past couple of years [the company] has had to bid [on everything]. ... It's been really tough since 2008. The worst year was 2010. [The company] had three 'red' years 2008, 2009, and 2010. [That] made [it] more efficient. [The company] cut overhead and really trimmed [its] operation." [#11]
- The white male owner of an SBA-certified specialty construction company said, "My business has been shrinking [the last three or four years]. ... Because private work started to dry up about five years ago, I tried to get [my company] more involved in public jobs. But because of the roadblocks the state has set up, [it] really hasn't gotten any jobs." [#25]

- The white male owner of a survey company said that his mix of work has changed drastically. "In 2011 [the firm] did three times as many jobs as [it] did in 2009, but [the revenue generated in] 2011 was [only] 30 percent of 2009." [#5]
- According to the female majority owner of a non-certified specialty construction company "The company started out in 2005, and [it] did really well up until 2008. ... Then it died to nothing in 2008 and it's been very slow since. ... So, [the company's] growth has been a downward spiral since the economy slowed down. [It] stays alive by doing a lot of odd stuff — just little things here and there." [#30]

According to interviewees, a few businesses may have survived because they were well-capitalized going into the economic downturn. For example:

- The female majority owner of a non-certified specialty construction company said, that the company has survived by keeping its overhead down, by being careful with spending, and because it owns the land and equipment, which it purchased from their father's business. She said, "When it gets really slow, a few bills don't get paid but [the company] is able to stay alive." She went on to say, "[For a firm to be competitive now], it should have its own equipment and a good estimator." [#30]
- The female owner of a DBE-certified specialty construction firm said she has a good year in 2008, which helped her survive the following years. "In 2009, it seemed that things were going sideways before I saw it. A lot of the equity in the company was being used to keep the company open. ... I tried to get help from the banks but they said 'No, absolutely not.'

 [The company] had good income but it was going right back out the door to pay employees, debt and interest." [#27]
- One business owner, however, pointed out that his firm was not as well capitalized as his larger competitors. The African American owner of a non-certified consulting firm said, "I think that companies that have been established a long time have ways to wait it out with rainy day funds. [These companies] know how to navigate in this economy, unlike smaller companies like mine. How [can a company] respond to a situation like this without big savings? [Even the big companies have] laid some people off, too." [#4]

A few business owners and managers said that their companies did not see a decline in work due to the economic downturn. Examples of those comments include the following:

- The Hispanic American owner of a non-certified construction company said, "Every year [my business revenue] almost doubles." He said, "That was true except in 2011, which was flat, but still profitable." [#29]
- The white male representative of a woman-owned, non-certified construction company said, "[The company] has been growing. Last year was definitely [its] biggest year." [#34]
- The female Asian American principal in an Asian American-owned, MBE/DBE-certified engineering company said, "[Our firm is] pretty diverse, in the sense that [it] works for [prime] contractors and public agencies [it] does some work for transit, some work for the airport, some work for the military, some work for wastewater, transportation, solid waste, so when the economy plummeted, [it] did not plummet with them. [Our firm] did not have to lay anybody off as a result. And then in 2009 [it] got to hire some people. I think

part of it was that, one, [our firm] didn't do any private development, and two, [it] didn't have just one main client, because all of them suffered. Because [its] work was pretty diverse across many public agencies, [it] survived." [#1]

Current economic conditions. Some business owners and managers said that economic conditions were improving. For example:

- According to the female owner of a DBE-certified specialty construction firm, "[Market conditions] are better today than they were a year or two ago. As with anything, the strongest will prevail and be there in the end. It's getting better but [it is still] unpredictable." [#27]
- A white female manager for an MBE/DBE/SBA certified engineering company said, "[Our company] had good years in 2008 through 2010 but 2011 was tough. Now [it's] back to a pretty good level and I think that is similar to what other firms are seeing." [#9]
- The white female co-owner of a non-certified construction company said her company is hopeful about the near-term market. She said, "We hear that the private sector is improving, that small contractors are getting work. Plus, a lot of public work is going to bid in the summer. We hope [our company] has a better year." [#31]
- The female co-owner of a construction company said, "Now you are starting to see business start to pick back up. You don't feel the despair in the air." [#24]
- Based on conditions at the time they were interviewed, many other business owners and managers said that market conditions were improving. [for example, #7, #16, #20, #21, #32, #35, #36]

Other business owners and managers said that they have not yet seen an upswing in market conditions. For example:

- The general manager of a woman-owned, DBE-certified specialty contracting company said, "[The current market conditions in the local area] are on a downtrend. There is limited paving in [our region], which makes it difficult [for our company]." [#18]
- The white female owner of a DBE-certified specialty contracting company said, "I haven't observed any changes [in the marketplace] this year." [#12]

Business owners' experiences pursuing public and private sector work. Interviewees discussed differences between public and private sector work.

Most interviewees indicated that their firms conduct both public sector and private sector work. [for example, #10, #14, #17, #18, #3, #22] Managers of a Native American-owned, DBE-certified engineering firm reported that the firm competes for tribal work in addition to other projects. [#6]

A number of interviewees noted that the slowdown in private sector work resulted in more companies pursuing public sector work. Examples of such comments include the following:

■ The president of an engineering industry trade association said that his organization's members' work is "predominantly public sector [work], particularly now since there isn't

any private sector work." He remarked, "The firms that had a diverse portfolio are doing mostly their public side. The firms that did nothing but private sector work don't exist anymore." He said that, even in the best of times, the split among his organization's members between public and private sector work was 75 percent and 25 percent, respectively. [#38]

- The Subcontinent Asian American male owner of a certified engineering firm said that because private sector has been slow, there is more competition for public sector work. However, he explained that, "Over the last six to nine months I've seen more projects kicking off in the private sector." [#10]
- A co-owner of a concrete construction firm said that the mix of private sector and public sector work for his firm depended on market conditions. He reported that his company was trying to phase out of working on public roads based on aggressive competition for that work. [#17]
- Business owners and managers generally indicated that opportunities in the private sector are more dependent on the strength of the economy. [for example, #10, #14, #17, #3, #31]

Some interviewees reported that they preferred private sector work over public sector work. Some of the comments indicated that performing private sector contracts was easier, more profitable, and more straightforward than performing public sector contacts. For example:

- The Hispanic American co-owner of a construction company reported that he works on both private and public sector contracts. He indicated that there is now a lot of competition in both sectors. He also reported, "There's more paperwork on the public side, filling bids out a lot more work there. And then [the public jobs require] bonding." He went on to say that it is difficult to be profitable on a public sector project. "There aren't as many avenues for change; it's harder to prove change in design. And everything trickles downhill. So, [my company], as a subcontractor, may think something's a change, or the design's been changed, but the [general] contractor ... may be tied to the main contract in the sense that [he may say something like], 'Hey, you saw the details the same as the next guy did.' It seems harder to make money on public works projects. It used to be the other way around." [#26]
- The Asian-Pacific American owner of a DBE-certified engineering company said, "There are differences between going for public and private contracts. On public contracts, most of the work is done on an hourly basis fee-wise so [the firm] really has to look at what [the] hours are going to be. Depending on the agency, there are requirements on the overhead and multiplier. [The firm] has to be current on [its] financials and sometimes has to be audited. That's totally different on the private sector where we can respond, '[My firm] can do this job for X amount of money."" [#3]
- The co-owner of a concrete construction company said, "It's difficult to make money in the public sector." He reported that this difficulty was due to "dealing with the personalities that come from the public sector employees." [#17]
- The white male owner of a construction company said, "Yes, I would say the private sector is far easier than the public sector. [There is] less competition in the private sector. In the private sector, jobs are often estimated, signed, and completed within a 3 to 4 week period,

maximum, whereas in the public sector, it will take [the owner] 3 to 6 weeks to accept proposals, another few weeks to review those, and [that process encourages] more contractors to bid on the same job. Private work is quicker to happen, quicker to get done, quicker to get paid." He also indicated that private work is more profitable than public work because of additional requirements on public work, including increased insurance, bonding, and additional paperwork. [#22]

- When asked if profitability differs between public sector and private sector, the white male representative of a woman-owned, non-certified construction company said, "It's actually more profitable to be in the private sector versus the public [sector], because [my company] doesn't have to deal with as much stuff. There isn't as much paperwork. I could raise my [company's] prices [to work in the public sector], but I don't feel that's correct." [#34]
- The white female CEO and co-owner of a WBE-certified construction company said that her company does both private and public sector work, and that it varies from year to year. She said, "We prefer to do private sector work. ... I would say [that it's easier to get work in the private sector over the public sector]. [The private sector] isn't looking for the low bid." ... [It's easier to do the work in the private sector]. There isn't as much paperwork. [The private sector generally] pays faster. I think there is also a little more profit in the private sector." [#11]
- The white male owner of an SBA-certified specialty construction company reported, "I'm not sure if it is more or less profitable to work on private or public jobs. ... There's more paperwork in the public sector. [#25]
- The female majority owner of a non-certified specialty construction company said that the company does maybe 75 percent private sector work. She said, "That can easily change but tends to be more private work than public. [The company] finds that the private work is so much easier. One on one, do this work and get paid. With public work, [the company] has to meet prevailing wage, has to be competitive. Also, public work just doesn't pay as fast. [The company] has to wait 30 to 45, even 60 days to get paid. A lot of times [with public work the company] has to have bonding. That's tough in this economy. It's much easier to deal with [private sector work]." She also said that private sector work is more profitable. [#30]
- When asked if it is easier for his firm to get work in one sector or the other, the Pacific Islander owner of a DBE-certified engineering and specialty construction company replied, "It depends. If [your firm] is established in the public sector, [it] will get a chance. In the private sector, [the same rule applies]. He said reputation and relationships matter. He continued, "In the private sector, [a firm can] mobilize faster and get the job done faster. In the public sector, there are so many things [a firm] must have just to get started. ... Most of [my firm's] scope of work is the same whether [it] is in the public or private sector. There may be reporting requirements that are different."
- Concerning differences in profitability between public and private sector jobs, the same interviewee replied, "It depends. Profitability is based on performance. There is a problem with design-build projects in the public sector where the [agencies] keep on changing the requirements. This becomes annoying and less profitable. Any public project has a lot of change orders." [#37]
- The white male owner of a construction materials supply company said, "There is more profit in the private work, [because] it's not near[ly] as competitive [as public work]." [#2]

- The Hispanic American owner of a DBE-certified engineering firm said comparing profitability between the private and public sectors is like comparing apples and oranges. He explained, "In the public sector, your [company is] lucky if [its] hitting 15 percent [profit], and more like 10-15 percent [is normal]. In the private sector [profit] is more like 60, 70, 80 percent. The private sector is focused on the company's capabilities to perform, not on certification, size standards, or a check mark on a form." [#7]
- When asked if there is a substantial difference between working in the public sector and working in the private sector, the general manager of a woman-owned, DBE-certified specialty contracting company said, "Yes. The public sector is more rigid and the contract requirements are increasing daily, almost, and they are extremely complex and the scheduling is extremely rigid. ... It is more profitable to do business in the private sector." [#18]

Some interviewees said that prevailing wage requirements on public sector work made private sector contracts more attractive for their companies. For example:

- A minority female co-owner of a non-certified construction company reported, "[Our company] pays [its employees] more than other non-union contractors, so [it can] attract better employees on private jobs. With public work, everyone pays the same rate, so [our company] loses that advantage." She also reported that her company finds the profit margin is higher on private sector projects. She said, "[In private work, the company] doesn't have the prevailing wage issues." [#28]
- The female co-owner of a non-certified construction company said her company finds that the profit margin is higher on private sector projects because private sector projects do not have prevailing wage issues. [#24]
- When asked what the difference is between public sector work and private sector work, the African American owner of a DBE-certified trucking and specialty contracting company said, "Price [is the big thing]. [The company] has to pay a lot more in the public sector. [It] has to do a lot more paperwork. With private sector work, [the company] just sends the truck and driver there, pays him the \$20 per hour rate, and finally makes a little money. But with federal jobs, [the company] goes backwards." [#36]

Some interviewees said that current market conditions are such that there are more bidders on government contracts and that competitors sometimes submit low-ball bids on public sector work. Examples of such comments include the following:

- The female co-owner of a non-certified construction company said it's a tough market out there right now in both the public and private sectors. She said, "In the public sector, [the company] is bidding and working against the engineer's estimate. Right now, contractors are [bidding] about \$30,000 under the engineer's estimates. The public owners are taking contractors who may or may not know what they are doing. It's 'low or no go.'" [#24]
- Representatives of a large publicly-owned concrete company reported, "Private projects may only solicit two companies to bid [so there's much less competition]. If it's publicly advertised, every company that knows about it bids on it. There can also be financial penalties [for late completion, etc.] on public work where there really isn't on private work." [#15]

Other interviewees preferred obtaining public sector contracts because they were more certain that they would be paid. Certainty of payment on public sector projects was a frequent comment among those business owners and managers. Examples of those comments include the following:

- The female Asian American principal in an Asian American-owned, MBE/DBE-certified engineering company said her firm does virtually no private sector work. "They don't pay," she said. [#1]
- Managers of a Native American-owned, DBE-certified engineering firm said, "In the public sector, [the firm] does get paid. There is a more talented, qualified client. In the public sector, there tends to be a more clear work scope, and a fairer contract. The public sector is always more sophisticated." [#6]
- The female owner of a DBE-certified construction company reported that her company primarily works on public roads projects. The firm's customers are public and government agencies. They do very little work in the private sector. She said that contractors who work in the private sector are very adept at keeping DBE contractors from participating in that work: "The reality is that the folks who [work in the private sector] and do that well ... do a really good job of keeping out DBE subs." [#40]

Some interviewees said that they preferred public sector work because it is more profitable. For example:

- A white female manager of an MBE/DBE/SBA certified engineering company reported, "Although [our company] does about 80 percent of [its] work in the public sector, when that work dries up, [it] has to look around at the private side. ... The private side is generally all about money and is mostly for developers. For us, this is risky because we sometimes have to do more work for less money. ... Although some people say the private side is more profitable than the public side, that's not been the situation for us. The public side has definitely been more profitable." [#9]
- When asked if there are any substantial differences between working for the public sector and the private sector, the white female owner of a DBE-certified specialty contracting company said, "Paperwork documentation [is a huge difference]. The public sector requires more documentation." However, she also said, "[For my company], it's easier to get public sector jobs. [It] doesn't advertise on the private sector side. ... [My company sees some difference in profitability between private sector and public sector]. [It] makes more money in the public sector than the private sector. Private sector jobs tend to be a one day deal, where the public work is longer duration and is the majority of our work." [#12]
- The white male owner of a specialty contracting company said that there was no real appreciable difference between getting private sector work and public sector work, but that public sector work is more profitable. "Private work is always a lower rate, because a company may only pay its employees \$9.50 per hour [on a private job], but on a prevailing wage job it may be \$48 per hour, with [the cost of] benefits." [#20]
- The African American owner of a DBE-certified specialty contracting company said there is a difference in profitability between public and private sector work. "In the public sector, there is a larger range of profitability. In the private sector, there is more competition and

there are bidding wars, so the profit margin is pretty thin. [With] public work, if [the company] can get the job, the profit margin is a little bit better than the private sector, but there isn't as much work." [#35]

One interviewee said that pursuing private sector work in addition to her public sector contracts was difficult because she was a union employer. The female manager of a Native American-owned, DBE-certified construction company reported, because she is a union employer, it is more difficult to get work in the private sector than in the public sector. She explained, "Private work does not usually use prevailing wages. If it's a prevailing wage job it's going to be union wage rates. [Our company] is signatory to the union." [#32]

Some firms reported that they primarily conduct private sector work and have attempted to obtain public sector contracts, but without success. For example:

- The Hispanic American owner of a non-certified construction company indicated that his company rarely does public work. He has looked into working on public jobs and even did one job for his local city. The city required that he get a surety bond and that was difficult for him. He does look at public jobs listed on the Internet, looking for opportunities. He stated, "I [spend a lot of time looking] for [public] jobs ... and I don't get anything." He has found that activity to be unproductive for his business. [#29]
- The African American owner of a non-certified consulting firm stated that [his firm] has sought work in the public sector, including WSDOT, but with no success. He indicated that, having spent many years employed in the public sector, he thought that he understood it, [but doing business in the public sector has remained elusive]. [#4]
- The Asian-Pacific American owner of a DBE-certified engineering firm said that his firm has tried, without success, to be a prime consultant on government work. To date, his only success at being a prime has been on private sector contracts. He, in part, attributed his lack of success as a prime with public sector agencies to limited marketing budget for that activity due to his firm's small size. [#3]

Some interviewees with experience in both the private and public sectors identified advantages and disadvantages of private sector and public sector work. Examples of those comments include the following:

- The white female co-owner of a non-certified construction company said, "In the early years, [the company] did more private work. As time went by, [the company] did more and more public work because that was most readily available in the current market." She further said, "When [your company] does public work, you know that [the company] will be paid. It's less certain in private sector work. But, with private sector work, there is much, much less paperwork. Private [sector] work is more relaxed." [#31]
- The white male owner of a survey company said, "In private work there is always much more emphasis on production. Working in the public sector, there is no clock. Both public and private sector work have the same parameters. It's still a personal contact more than anything else to get the work in the first place. ... Profitability works out about the same for both private and public jobs. On private jobs, [the firm] puts in a number, and the [prime contractor] is going to want to stay close to it because [it made up a] bid based on that

- [information]. Whereas in the public jobs, [the firm's] initial number will probably be a little bit tighter, but once the job is underway, [it] will probably have a better chance of getting reimbursed for additional work. Private contracts don't want to pay additional." [#5]
- The African American owner of an MBE/DBE-certified engineering company summed up his thoughts on private sector versus public sector work with, "I think that getting work [in either the private or public sectors] is based on your firm's relationships and experience. On the private side, if you have the relationships, and [your firm] does a good job, the client is going to come back to [it]. It's that simple. ... On the public sector side, the process is long and drawn-out, which allows [my business], as a small firm, to get [its] resources lined up, and I can plan for that ... whereas on the private side, it's harder to anticipate, the timeline is shorter, and therefore [the firm] is chasing [its] tail a lot. So working on the public side allows a small company to anticipate its resources and make sure [it] has good people to apply to it." [#8]
- The white male owner of an SBA-certified specialty construction company said that he prepares his company's bids the same way whether on private or public jobs, but the difference between private and public work is the "wage grade," with the wage grades being higher on public work. He reported that, ultimately, his profitability is similar between the two types of projects. He added that he has to be careful on the private side because "sometimes people go away and you don't see them again after the work is done, [so there is a risk of non-payment]." [#21]
- When asked to describe differences between private and public sector work, the female owner of a DBE-certified specialty construction firm said, "One difference between public and private work is that the public jobs are usually bigger in size and cost. [There is no] private work on the freeways. [Also], it's easier [for my company] to get the private work because they come to me. I don't [have to] go looking for [those jobs]. Unfortunately, I have to spend a good amount of my time seeking public work. [The company] can't hold on to a good group of [employees] if all [it] is going to have is private work because the pay is not there. It's too expensive to live around here. Financially it's easier to do private work but to keep a good group of [employees]. [The company] can't just do private work."

She added, "There is very little profit, if any, on prevailing wage public work. [The company] has to have [its own] equipment out on a public job to make any money. [Employees] are just way too expensive. [There's also the problem on public jobs] that the prime [contractor] has trouble making any money so at the end of the job, [it] squeezes [the] sub[contractors]. [My company] has experienced that many, many times and at inopportune times when [it] doesn't get paid thousands and thousands of dollars." [#27]

- When comparing public and private sector work, the female manager of a Native Americanowned, DBE-certified construction company said, "It is not necessarily more difficult to do private versus public work. A lot of our [company's] work is the same whether it's a private or public job. Private jobs tend to pay quicker because [there is] less paperwork involved. Once [the company] gets the hang of the public side paperwork requirements, the process is workable, even if the contractor doesn't ask it of [our company]. It falls on our [company's] shoulders to ensure all the requirements are met." [#32]
- The white male general manager of a general contracting company said, "[I have seen that] in private sector work there is a lot more room for negotiation and change. Specifications

aren't as rigid. People are always looking for ideas to save money. ... For [our company], it's easier to find work in the public sector, because, for one, [it's] union, so [it] can't do the work as cheap as non-union companies. [However], I think it is easier to do the work in the private sector], because in the private sector people are more open to change, to cost-cutting ideas." [#33]

- When asked if there was a difference between private sector work and public sector work, representatives of a large publicly-owned concrete company said, "Yes, [one difference is] specifications can be totally different. [On] most public work projects, the owners know [precisely what] the outcome [will be]. [With] private projects, the owner has in mind what the project should look like when finished, but he may not know how to put that into specification form. [Also] with private work, credit is always an issue but [there is] way less paperwork zero." [#15]
- When asked if there are differences between working in the public sector versus the private sector, the Pacific Islander owner of a DBE-certified engineering and specialty construction company said, "In the private sector, [a firm can] mobilize faster and get the job done faster. In the public sector, there are so many things [a firm] must have just to get started. ... Most of [my firm's] scope of work is the same whether [it] is in the public or private sector. There may be reporting requirements that are different. ... It depends. Profitability is based on performance. There is a problem with design-build projects in the public sector where the [agencies] keep on changing the requirements. This becomes annoying and less profitable. Any public project has a lot of change orders." [#37]

C. Doing Business as a Prime Contractor or as a Subcontractor

Business owners and managers discussed:

- Mix of prime contract and subcontract work (page 20);
- Prime contractors' decisions to subcontract work (page 23);
- Subcontractors' preferences to do business with certain prime contractors and avoid others (page 28); and
- Subcontractors' methods for obtaining work from prime contractors (page 33).

Mix of prime contract and subcontract work. Many firms that the study team interviewed reported that they work as both prime contractors and as subcontractors.

- The president of an engineering industry trade association said that some of his organization's members do prime contracting work, some do subcontracting work, and some work both as prime contractors and subcontractors, even some of the larger firms. [#38]
- The study team interviewed many firms that primarily work as subcontractors but on occasion also work as prime contractors. [for example, #3, #19, #7, #8, #11, #18]
- Other firms reported that they usually work as prime contractors but will also serve as subcontractors. [for example, #5, #16, #25]

■ Some firms reported that they primarily work as prime contractors or as subcontractors. [for example, #17 and #28]

Some firms reported that they primarily work as subcontractors because doing so fits the types of work that they typically perform. For example:

- The Subcontinent Asian American male owner of a certified engineering firm said that his firm does 20 to 30 percent of its work as a prime, but his firm's role is more typically as a subcontractor. He explained that the type of work that his firm does just lends itself to subcontracting, and he said his firm is "okay with that." [#10]
- The Hispanic American co-owner of a construction company said that his firm's type of work is such that it always works as a subcontractor. [#26]
- The white male representative of a woman-owned, non-certified construction company said, "[My company] works as a subcontractor. [It] has a general contractor's license, [and it] could work as a general contractor, but all of the work [to-date] is as a subcontractor, [which is mostly due to] the nature of the work." [#34]
- The general manager of a woman-owned, DBE-certified specialty contracting company said the reason that the company is almost always a subcontractor is that the contracts that come out are for "highway construction," not for her specific type of work. [#18]
- According to the white male owner of a specialty contracting company, "[My company always works as a subcontractor]. In this field of work there is very little [it] could do as a prime contractor." [#20]
- The female owner of a DBE-certified specialty construction firm explained, "[The company] has had a few contracts in which agencies were looking specifically for [the services we provide]. These jobs are done directly as a prime contractor. Dollar-wise, 90 percent of our work is as a subcontractor. [The company] hasn't had prime contracts on private projects for [these services]." [#27]

Some business owners and managers said that they mostly work as subcontractors because they cannot bid on the size and scope of the entire project, or find it difficult compete with larger firms for those prime contracts. Examples of comments included:

- The female Asian American principal of an Asian American-owned, MBE/DBE-certified engineering company said, "Most projects are just way too big for [my firm] to be a prime, because they involve so many aspects." Later she noted, "[My firm] does real specialized areas [of work]. [#1]
- When asked why his firm always works as a subcontractor now, the African American owner of an MBE/DBE-certified engineering company said, "[For] most of the projects that are out there, the environment is so competitive, and [my firm] can't compete with the large firms." [#8]

A few firm owners said that barriers to bidding as a prime contractor was why their firms primarily performed as subcontractors. For example:

- The white male owner of a construction materials supply company said that his company is primarily considered a subcontractor. He said, "[The company] could be a prime [contractor] for WSDOT but that would require providing a certified financial statement that would cost \$3,500 to \$4,000 to produce. I don't feel it is justifiable for [the company] to spend that kind of money to be a prime contractor." [#2]
- The female manager of a Native American-owned, DBE-certified construction company reported, "[Our company acts] as a prime contractor on less than 1 percent [of its work]. [The company] has not been able to build up resources to be able to bid [on even] smaller jobs as a prime [contractor]." [#32]
- The African American owner of a DBE-certified trucking and specialty contracting company said, "[My company] has never [worked as a prime contractor]. [It] doesn't have the capacity, the money, or the bonding." [#36]

Some business owners and managers said that they mostly work as prime contractors and prefer to do so. Examples of those comments include the following:

- The Hispanic American owner of a non-certified construction company indicated that he prefers his company to work as a prime contractor. He said that 90 percent of the time the company works as a prime contractor. He explained, "I [talk] directly to the [customer when my company works as a prime contractor]. When [the customer] talks to me and explains what they want, I [know] what they mean." Explaining what it's like to work as a subcontractor, he continued, "When the [prime] contractor tells me what to do at the job, sometimes ... he's not [effectively communicating] what the customer [really] wants. Then when the job is done, [the customer often wants changes] when it's too late." [#29]
- The white female co-owner of a non-certified construction company said the company now works mostly as a prime contractor, probably 90 percent of the time. She said, "[The company] mostly works as a prime because then [it] has more control."
- The white male general manager of a general contracting company reported, "[The company] works probably 90 percent as a prime and 10 percent as a sub. [It] probably did a lot more subcontracting earlier on in [its history]. As [it] gained experience and capital, [it did more and more work as a prime contractor]." [#33]

A few business owners said that their work is fairly evenly split between prime contracts and subcontracts. Comments about those experiences included the following:

In deciding whether her company will be a prime contractor or a subcontractor, a white female manager for an MBE/DBE/SBA certified engineering company said, it depends on the size of the project, what capacity it would take for the project, and whether another firm has a strong relationship with the agency or owner sponsoring the project. If another firm has that kind of relationship, then it would make more sense to join with that firm as a sub[contractor] for the project. [Our company] doesn't generally get into joint ventures. Rather, one firm would be the lead and the other would be a sub." [#9]

- According to the four representatives of a large publicly-owned concrete company, "[The company] is set up to manage [a project as a prime contractor], but [it] prefers to subcontract. That way there isn't as many resources tied up [as when it acts as a prime contractor]." [#15]
- The female majority owner of a non-certified specialty construction company said, "It seems that when business is good [the company] more often works as a prime [contractor]. [It] works as a subcontractor when the job is too big for [it] and the job includes [one of the company's services], so [it] works as a subcontractor on the job doing the [service]." [#30]
- The Pacific Islander owner of a DBE-certified engineering and specialty construction company described a similar experience, "[My firm] works as a prime contractor about 50 to 60 percent of the time. I look at the size of the project. If it is [field work and] more than a million dollars, [my firm] can't bond that." [#37]

Prime contractors' decisions to subcontract work. The study team asked business owners whether and how they subcontract out work when they are the prime contractor.

Some prime contractors say that they usually perform all of the work or subcontract very little of a project. Examples of such comments included the following:

- The white male owner of an SBA-certified specialty construction company reported, "When [my company] is the prime contractor, [it] generally does all the work and does very little subcontracting. The reason why [it] doesn't have sub[contractors] is that I'm loyal to my employees. [My firm will] buy materials, but as far as placing everything and doing everything, [it] will do that [it]self. Mainly economics has forced that and liability. [My company] is responsible, and I like to have my hands on what [it is] doing." [#21]
- The female manager of a Native American-owned, DBE-certified construction company reported, "[Our company] very seldom subcontracts out any work and if [it] does, the subcontracted work is for a very small amount." [#32]

Many interviewees from companies that use subcontractors indicated that they use the firms with which they have an existing relationship. Both majority-owned and MBE/WBE firms that use subcontractors made such comments.

- The female co-owner of a non-certified construction company stated, "[The company] has a reputation with the subs who have worked for [it]. Certain sub[contractors] will travel with us. [Our company] tends to use sub[contractors] who have worked with [our company] before and have been easy to work with." She also stated that there are subcontractors her company will not work with, such as the one that walked off the job recently after six months work. [#24]
- The co-owner of a concrete construction company said that his firm hires subcontractors in disciplines such as traffic control, saw cutting and concrete pumping. He said when the company chooses subcontractors, "It's usually a select group of [subcontractors] that [have] worked with [my company] in the past." His company uses the same subs for both private and public work. "They're [companies] I can count on." He went on to say that he does not solicit bids from certified MBE/WBEd. "I don't solicit them, no ... and not because of any other reason but there typically aren't any in the services that I need." [#17]

- A Subcontinent Asian American male owner of a certified engineering firm said, "On projects where we are [the] prime, we'll have a sub to do [a specific type of work], and there's only one firm around the area who does [that work]." He continued to describe the use of other subs. "We use ones that we've used in the past that we know [will] do good quality work." [#10]
- The Hispanic American owner of a DBE-certified engineering firm said that his firm often uses subcontractors. He said that his firm does not specifically look for other certified firms to do subcontracting work for it, and that being qualified [to do the work] is the important thing. He said his company has relationships with some subcontractors and will continue to use [those firms] and work with [those firms]. When a subcontractor has poor leadership, lack of expertise, no quality system, his firm chooses not to continue working with [it]. He went on to say his company has a very specialized niche and few other certified firms are available in that market. [#7]
- The representative of a DBE-certified construction company said that the firm sometimes hires subcontractors for specialized services. "Usually a referral is received from the prime contractor or WSDOT [to a company] in the area [of the project], and it's usually [a company] that's already on the jobsite." [#19]
- The white male representative of a woman-owned, non-certified construction company said, "[The company] would very rarely hire a subcontractor. [It] did a job a year and a half ago, cutting in the street, and [it] hired a safety manager traffic control. [I found this subcontractor] by word-of-mouth, people that I know that have worked on sites before." [#34]
- The African American owner of a DBE-certified trucking and specialty contracting company reported, "[I select subcontractors by] calling other companies that I know. I've been in the industry for years. I know who has trucks and who doesn't. If everybody's really busy, I'll go right to the [OMWBE] directory and call companies in [the geographic are where the job is]."
 - He continued, "The only difference [in hiring subcontractors for a private sector job or public sector job] is the certification requirement. Public jobs that are available generally have a DBE goal and private jobs don't." He continued, "[If my company hires a subcontractor on a job], the biggest limiting factor is the distance to the jobsite, because transportation is one of the highest costs in trucking. The driver makes 40-some dollars an hour, and the cost of a tire alone is \$850 and there are 24 of them [on a truck]. The payment on the truck is \$3,000 to \$6,000 a month, and fuel runs \$400 to \$500 per day." [#36]
- The Pacific Islander owner of a DBE-certified engineering and specialty construction company "I [like to work] with companies [that my firm] has worked with before. If it's a new firm, I will do a Vendor Verification Form that my firm uses. My firm is ISO-certified and I need to make sure the sub can qualify."
 - He continued, "[There are some subcontractors that my firm won't work with], because of poor performance. [There are also subcontractors that my firm has good relationships with and uses regularly] because [it] can trust [that those subcontractors] will get the job done. Projects are so competitive, there is little markup for overhead. The team must really be able to get [the job] done." [#37]

Some interviewees described how similarities and differences between considering DBEs and considering other firms as subcontractors. Examples of those comments include:

Representatives of a large publicly-owned concrete company said, "[The company] will hire subcontractors for specialty services. [It finds those subcontractor] by sending out a request for quotes to a list that [it] has of contractors. ... [The company] has been on projects with MBE/WBE/DBE goals. [It solicits for certified subcontractors by] going to the OMWBE website and look for new contractors. [It] also maintains a database of contractors [it has solicited before]."

They went on to explain, "Companies that are MBE or DBE are smaller companies so it's harder to get information out of them. The smaller the companies, the harder it is. They are also probably companies that haven't worked in that arena before, or not as often, so specifications requirements, submittal packages are tougher [for them] to get a hold of. They're not as familiar with safety plans as bigger companies. They do have difficulties filling out paperwork correctly. The timeliness of it and correctness of it [is a problem]. It's been quite challenging. Especially if there's a language barrier — that makes it tough to communicate."

They added, "[There are subcontractors our company will not work with, such as] companies with past history of inability to perform [the work]. There have been some legal issues with particular companies or they can't meet the insurance requirements or bond the work. [Our company] has a credit prequalification requirement and a safety requirement [that must be met by potential subcontractors]. This is the same whether the company is an MWDBE or not." The company has "'groups' of subcontractors that [it] uses frequently. For small projects, [it] may send out solicitations to just a small group [of potential subcontractors]." [#15]

- The Native American co-owner of a construction company explained, "[The company] will hire plumbers and electricians they have worked with and know." He added that the company does not solicit bids from M/W/DBE contractors and admitted that he did not actually know what the designations mean. He elaborated on the requirements for subcontractors, "[The company likes working with subcontractors that provide] good customer service, fair pricing, and good solid relationships." [#16]
- When asked if his company solicits bids from MBE/WBE/DBE-certified contractors, the white male general manager of a general contracting company said, "Yes. It depends on the project. If there is a large minority goal, then [the company] will actively seek out minority contractors. [The company] has a list of contractors that are minority owned. [It] will call contractors that are minority owned. Occasionally [it] will send out a solicitation notice to contractors, for larger projects. [This is the same process whether the project is private or public], but [the company] does very, very little private work."
- The same interviewee elaborated, "[The company's experience working with MBE/WBE/DBE subcontractors], is that some of [the companies] are not as capable, and some of [the companies] are very capable. If [our company] has a M/W/DBE subcontractor that [it] hasn't worked with before, [it] is very careful that the subcontractor is doing all of the paperwork correctly and that [it] has all [its] ducks in order before [it] starts on the project. But [our company] would do that with any contractor that [it] hasn't worked with before. ... [There are some subcontractors that our company won't work with], generally it

- is because [that company] didn't perform. [There are also subcontractors that our company works with regularly], because those subcontractors are easy to work with. [Those subcontractors] do what they are supposed to do." He said that there are MBE/WBE/DBE-certified companies in both categories companies with which his company won't do business and companies with which it regularly does business. [#33]
- The general manager of a woman-owned, DBE-certified specialty contracting company said, "[The company] sees no difference in working with a M/W/DBE certified company or a non-certified company. ... [There are some subcontractors that the company doesn't work with], because of bad business practices and dishonesty. [There are subcontractors that it tries to use all the time] because of dependability and quality of the work. Obviously the price has to be competitive." [#18]
- When asked if her company solicits bids from MBE/WBE/DBE-certified contractors, the white female owner of a DBE-certified specialty contracting company said, "No, [the company] hasn't done that. The only subcontractors [it] ever hires are the engineering [and survey] companies. [The company chooses the engineering company] by calling the State of Washington or the [prime] contractor to see what engineering company [is being used on the job already]." She said that her company has never worked with an MBE/WBE/DBE subcontractor. She went on to say that there are some subcontractors that her company has a good relationship with and uses regularly. She likes those company's because, she said, "Those companies are very thorough and don't miss anything." [#12]
- A participant in a trade association meeting representing a construction company described how he chooses a DBE subcontractor. "My basis is two-fold when I am looking at a subcontractor. I need to know that they are responsible enough to do the work. I need to know that I don't have to overly oversee their work and manage it for them ,and price. Obviously price comes into everything that happens with what we do in the public market and so to answer your question, If I have a responsive low bid DBE sub-contractor on a non-goal job, of course I will use them." [AGC#1]

Some business owners indicated that they based selection of subcontractors on low bid or on qualities that gave a team the best opportunity to win a contract. For example:

- The white male general manager of a general contracting company said that his company selects subcontractors based on low bid "unless the contractor is clearly not capable of doing the work. ... [The company evaluates the potential subcontractor] before the bid is awarded to be sure [it has the capacity and ability to do the work.]" [#33]
- The president of an engineering industry trade association said that when selecting subcontractors, in general, his organization's members focus on the quality of the overall team, first and foremost: "[WSDOT] selects the team, not just the prime. So, [prime consultants'] first consideration is to select subconsultants on their team that give them the best shot at winning the job, and all other considerations are tied for second." When asked to identify some of those other considerations, he cited "hard [DBE] goals and soft [DBE] goals." [#38]

Some owners and managers of MBE/WBE/DBE prime contractors said they seek out other MBE/WBE/DBE firms or small businesses as subcontractors on their projects. For example:

- The Asian-Pacific American owner of a DBE-certified engineering firm said that he tries to solicit small businesses or DBEs when he needs to have subconsultants. "I think ... small businesses are capable of joining together to do work" [#3]
- Managers of a Native American-owned, DBE-certified engineering firm had similar comments. "[The reason our firm contacts MBE/WBE/DBE firms and offers those firms subcontracting roles in our projects] is because [our firm] is [a certified DBE] and the [firm's owner and management staff] want to give other M/W/DBE firms an opportunity when we can. This comes from the president [of the firm]." When asked if there is any difference between certified MBE/WBE/DBE subcontractors and non-certified subcontractors, one of the managers said, "I don't see any difference. All do quality work. I don't think any [of the firms the company used] does anything better than any other." [#6]
- A white female manager for an MBE/DBE/SBA certified engineering company related her company's role as a mentor to other MBEs, "Our company has had MBEs and DBEs that worked for [it] as subs. [It] just finished a job in Oregon that had a team of all MBEs, WBEs, or DBEs and [our company] was the prime [contractor]. Being a small business, it's always nice to foster other small businesses to grow and help [each one] as well." [#9]

Most interviewees whose firms work as subcontractors reported that they rarely hire secondtier subcontractors. Most interviewees said that they never or rarely hire second-tier subcontractors when their firm is working as a subcontractor. Interviewees reported that the nature of the work often determines whether a subcontractor hires a second-tier subcontractor and whether they solicit and hire DBE-certified second-tier subcontractors. Past experiences (good and bad) with subcontractors also influence who they solicit. Comments about using second-tier subcontractors included the following:

- When asked if the company hires second-tier subcontractors when it is a subcontractor on a job, the general manager of a woman-owned, DBE-certified specialty contracting company said, "Rarely, but occasionally that happens." [#18]
- The female majority owner of a non-certified specialty construction company said, "[My company] very seldom hires subs, and almost never if [it] is working as a subcontractor. ...

 The only time [it] hires a subcontractor is if there is electrical or concrete [work]." [#30]
- A representative of a DBE-certified construction company said that the firm sometimes hires subcontractors for specialized services. "Usually, a referral is received from the prime contractor or WSDOT [to a company] in the area [of the project], and it's usually [a company] that's already on the jobsite." [#19]
- The African American owner of an MBE/DBE-certified engineering company said, "[When my firm is hired as a subcontractor] it will hire subcontractors for CAD work. It is relationships [that help my firm decide who to hire as a subcontractor]." He continued, "[There are subcontractors that my firm] will not work with, and the main reason is non-performance. [There are other companies that I have established relationships with]. [These companies] get the job done, and have good chemistry [with my firm]. [Companies

- like this] are well respected in the industry, and give me the opportunity to showcase [its] abilities to the larger firms [that I know to mutual benefit]." [#8]
- The white female CEO and co-owner of a WBE-certified construction company said that she subcontracts out certain work when performing as a subcontractor on a job. She explained that the company has relationships with some second-tier subcontractors and will hire those companies over and over for subcontracting work. She hires them repeatedly because, "[Those companies] do good work and perform. [My company] doesn't get stuck with something bad." [#11]
- When asked if her company hires second-tier subcontractors when her company is a subcontractor on a job, the white female owner of a DBE-certified specialty contracting company said, "Yes, [the company] hires engineering and survey companies to do utility adjustments. That's about it. And [the company] hires [subs for that work] quite often. ... [The company hires subcontractors] by requesting quotes [from potential subcontractors]." [#12]
- A minority female co-owner of a construction company that typically works as a subcontractor said that her firm hires other businesses as subcontractors. She said that she chooses subcontractors that have a good reputation and get the job done in a timely manner. She said, "[It's important that] [the company] knows what [it is] going to get." [#28]
- The Pacific Islander owner of a DBE-certified engineering and specialty construction company hires second-tier subcontractors for specialty jobs. [#37]

Subcontractors' preferences to do business with certain prime contractors and avoid other. Many owners and managers of firms that sometimes work as subcontractors indicated that they preferred to work with certain prime contractors.

Interviewees frequently mentioned speed and reliability of payment as reasons to prefer certain prime contractors and avoid others. Examples of those comments include:

- Representatives of a large publicly-owned concrete company said, "[Our company likes to work with prime contractors] that use [it] and pay regularly." [#15]
- When asked if there were prime contractors that with which his company would not work, the white male representative of a woman-owned, non-certified construction company said, "[Yes, because of] lack of payment. [The company] can deal with just about anything else. If you want [it] to work for you, you need to pay me." [#34]
- The white male general manager of a general contracting company remarked, "[The company has prime contractors that it prefers working with], because there's comfort in working with a company [it] has worked for before. [There are also prime contractors that the company will not work with], because of bad experiences, principally not getting paid." [#33]
- The Subcontinent Asian American male owner of a certified engineering firm said that there were particular primes that his firm especially likes working for, mainly because of administrative differences such as quick payment, which he said makes a huge difference for small businesses. [#10]

In addition to prompt payment for their work, many firm owners and managers said that they preferred prime contractors that are organized and easy to deal with, maintain safe worksites, and treat them fairly. Examples of those comments include the following:

- When asked if there are prime contractors that with which his company prefers to work, the co-owner of a concrete construction company said, "There's some [companies] that [are] just easier to make money with, because [those companies'] schedule jobs properly and [are] organized properly, and I don't have to worry about [the job site] not being ready when [my company] goes out to work." [#17]
- When asked if his company works with some prime contractors that are favorites, a Hispanic American co-owner of a construction company said, "[Yes, the prime contractor] understands our business, and understands what [my company] needs, and [the prime contractor] knows what it is going to get when it hires us. We like certain companies because [those companies] pay well, pay on time." He also reported that there are some prime contractors with which he refuses to work because those prime contractors do not understand the limit of services provided by his company. [#26]
- The representative of a woman-owned, DBE-certified construction company said, "There are [prime] contractors out there who work with [your company] as a team on a contract, and there are [prime] contractors who work against [your company], like [it's] the enemy. Everything's a team effort; working together toward a common goal. [The good prime contractors] find the answers, talk to the inspectors, work with [the company] to get problems resolved." [#19]
- The female co-owner of a non-certified construction company said the company establishes relationships with prime contractors that are fair and that communicate well. She said, "Communication is key. For example, one prime contractor [the company] worked for didn't communicate well, so we just don't work for them any longer." [#24]
- When asked if there are prime contractors that she prefers her company to work with, the white female CEO and co-owner of a WBE-certified construction company said, "Yes, definitely, because [those prime contractors] pay bills on time and have the jobsites ready when [my company's crew arrives to work]. There are also superintendents that the crew likes to work with better than others. It goes back to establishing those relationships."
- She added, "I can't think of any [prime contractors that my company won't do business with]. However, there are some that [it] quotes higher prices to, because it costs more money to do business with those companies." [#11]
- The female owner of a DBE-certified specialty construction firm stated, "There are probably a dozen prime [contractors] that I would bend over backwards for. First of all, [those companies] are respectful ... to [our workers]. [Each of] those companies know [my company], has [its] best interests at heart, and [my company's workers] are there to protect [it] and the public. [The workers] are not just there because [it is required]. I'm passionate about that. Second, [those companies] communicate and give [my company] feedback on [its] bids. And third, [those companies] pay on time."
- She went on to say, "There are probably a couple of primes [that I would choose not to work with]. I don't like to pick and choose but some [companies] are not respectful, not as safe, or refuse to pay." [#27]

- When asked if there are prime contractors with which his company prefers to work, the white male representative of a woman-owned, non-certified construction company said, "Oh, yeah ... Oh, yeah. [When a prime contractor] has [its] stuff together, has all [its] paperwork ready, all [its] permits are pre-done, [its] layout is ready to go. [My company] can show up, pull the stuff off the truck, get it done, get it wrapped up, cleaned up, and get out of there. It's all about speed, it really is." [#34]
- The white female owner of a DBE-certified specialty contracting company said, "[The company prefers working with some prime contractors] because the crews [from both companies] know each other from working together on a regular basis. [My company's personnel] know how [the prime contractor] operates." She explained that it's just so much easier to work with a company where there is already an established relationship and trust. [#12]

Some MBE/WBE/DBE subcontractors said that they had good experiences working with MBE/WBE/DBE prime contractors. Examples of such comments include the following:

- When asked if his company had any experience working with minority- or women-owned prime contractors, a Hispanic American co-owner of a non-certified construction company said that they had worked for a lot of 8(a) companies, because of military work, and for a woman-owned company. He said, "They were a lot harder than the [companies owned by] men. They were great. They knew what they were doing. It was a good experience." He said that his firm enjoyed working for certified primes because, "They weren't as large … not as sophisticated [as majority-owned prime contractors]. There's an ease about them." He indicated that the certified prime companies with which his firm had experience working did not use their certification as an excuse to do lower quality work or just get by. He said, "There was no chip on their shoulder." [#26]
- When asked if her company has worked with any DBE prime contractors, the female owner of a DBE-certified specialty construction firm said, "Yes, [my company] has worked with a couple of DBE prime [contractors]. Although I don't have empirical data, I'd say that DBE primes are more aware of how difficult it is for DBE firms." [#27]
- The African American owner of a DBE-certified trucking and specialty contracting company said, "[My company] worked for a ... major Hispanic prime. [It] was excellent to work with." [#36]
- When asked if his firm has worked with a prime contractor that is MBE/WBE/DBE certified, the Pacific Islander owner of a DBE-certified engineering and specialty construction company replied, "Yes, but the ones that want to work with [my firm] normally don't get the bid." [#37]

One firm that had been a subcontractor to a DBE prime contractor said that the prime contractor had some difficulties with the project. The female Asian American principal of an Asian American-owned, MBE- and DBE-certified engineering company said that her firm did some work for a minority-owned prime contractor. Her only comment was that the DBE prime contractor was a small company and had some difficulty with the project because of its size and inexperience as a prime contractor. [#1]

A number of business owners and managers said that certain prime contractors had treated them unfairly, and they now avoided them. Several minority and female business owners, or managers of those firms, added that certain prime contractors had listed their firms but not given them any work. Examples of perceived unfair treatment included the following:

- The Hispanic American owner of a non-certified construction company said that he is picky about for whom his company works as a subcontractor because of some bad experiences the company has had with slow payment or dishonest business practices. [#29]
- When asked if his firm has established relationships with some prime contractors that it prefers to work with, the African American owner of an MBE/DBE-certified engineering company said, "Absolutely. There are prime contractors that have used [my firm] strictly for [its] certification and given [it] absolutely no work." [#8]
- A white female manager for an MBE/DBE/SBA-certified engineering company said there are prime consultants the company prefers to do business with because they follow through on what they promise to do. In contrast, "[There are prime contractors our company would prefer not to do business with because] the [prime contractor] will ask [our company] to put out effort and spend time to be on the team and then [it] gets nothing out of it. After a time or two, you learn that lesson and it's not worth spending the time and resources." [#9]
- Managers of a Native American-owned, DBE-certified engineering firm said that there are prime contractors that with which the firm likes to work. Those prime contractors treat other firms fairly and pay on time. There are other firms with which their company will not work, especially those that do not pay on time or do not pay at all. The managers said, "Some [prime contractors] let the projects get out of control and then take it out on the subcontractors [by not paying]." [#6]
- The white male owner of a survey company said, "The [prime contractors that are good to work with] are the ones that give [my firm] a reasonable time schedule, and work with [it]. That, obviously, is a nice working environment for anyone. Some [prime contractors] ... earn the reputation that [it] is looking for someone to share the blame when something goes wrong." [#5]
- When asked if there were prime contractors with which his liked to work, the white male owner of a specialty contracting company said, "Yes. These are mid-sized companies where the owner of the company is on-site, can see and appreciate the skill set I have, and is well funded enough so that [it] can pay well within 30 days. [There are also prime contractors I will not work with], because of safety concerns or late payment." [#20]
- The white male owner of an SBA-certified specialty construction company explained, "There are some really good primes around here and if [one] calls, [my company] would help them." He reported that many years ago, his company had a bad experience with a prime. While using his trucks, the prime contractor damaged them and just walked away without paying for the damage and paying for only half of the work. He said, "It's really hard for my [company] to get paid as a sub from a big prime contractor sometimes. The [big company] might wait [my company] out, 120, 140 days. [My company's] payroll continues, [its] fuel [costs] continue. Around here, [my company] has had pretty good luck." [#21]
- When asked if there were prime contractors with which her company preferred to work, the female manager of a Native American-owned, DBE-certified construction company said,

"Yes, because [our company] has developed a good relationship with those prime [contractors]. A good relationship includes getting paid and having a prime [contractor's] crew that is good to work with by not causing problems for [our company] on the job. Our [company's] work is often in the latter stages of a job and if the earlier work hasn't been done to be ready for [our] work that can cause hardships for [our company]."

She went on to say, "There are prime [contractors the company] won't work with because [its] been burned. [There have been] some situations in which [a prime] contractor didn't go to bat for [our company] or stand up for [it], especially when the design was faulty. That made it difficult for [our company]. [There have been] situations in which [a prime] contractor agreed [that our company] did the work according to requirements but for some reason, the work had to be taken out and re-done, but [the prime contractor] doesn't pay [our company] for the re-do work. Those situations don't happen very often but when they do, it really hurts." [#32]

When asked if there are prime contractors with which he prefers his company to work, the African American owner of a DBE-certified specialty contracting company said, "Yes. [My company] has a tendency to receive work from certain contractors. It appears that these contractors [contact it] for one of two reasons: First, because the prime [contractor] doesn't have [our skill set] itself; or second, that the prime [contractor] has determined that [my company] is number one in the [services it provides] and [it] doesn't want a second-rate company."

He continued, "[There are some prime contractors that my company won't work with]. [For example, a prime contractor that practices] slow pay, or no pay or will only use [my company's] DBE status to get the job. Once [it] gets the job, [it] will keep [my company] for a few weeks and let [it] go. [The prime contractor] will then either self-perform or the work will go to [its] friend." [#35]

When asked if his company preferred certain prime contractors, the African American owner of a DBE-certified trucking and specialty contracting company said, "I liked [a prime contractor my company worked with a few years ago] because [it] would spend the three seconds [it takes] to pick up the phone and call [the subcontractor]. The communication was there. [It] did what [it] said [it] was going to do. [That prime contractor] would even help [my company] with prompt payment if asked. [It] was there for [my company]. I can't think of any other prime [contractor] that will do that. I'm working with [another prime contractor] that is starting to show promise. [It] knows my [company's] financial situation and is willing to work with [it]."

When asked if there are prime [contractors] with which his company will not work, he said, "It's hard to say that because when [your company] needs the work, [it] needs the work. Many of these prime [contractors] are all the same. A [prime contractor] will tell me [it] is going to list [my company on a bid] but then [it] doesn't. [It] doesn't include [my company in planning or bidding]. [It] sends [its] attorneys to lobby against DBEs, because [it] doesn't want the program. [It] takes [my company's] bids and tells me the number is too high, but [it] doesn't really communicate." [#36]

■ The white male owner of a construction company said that he likes working with prime contractors that have a lot of volume. Speed and ease of payment are advantages, along with training support. He said he does not work with prime contractors that are unethical, ignore safety concerns or requirements, or request that he does something outside of

- established protocol, like leaving uncertified workers alone while checking on another job site. [#22]
- The white female owner of a DBE-certified specialty contracting company said that there are prime contractors with which her company does not like to work "because of slow payment or non-payment, and bid shopping. ... I know that happens. There are contractors out there that give [my company's] prices to competitors." [#12]
- When asked if there are prime contractors with which he prefers the company to work, the general manager of a woman-owned, DBE-certified specialty contracting company said, "Yes, because of the project management ability, coordination, and [prompt] payment. [There are also some contractors with which the company will not work], because of slow payment, poor management, and some are extremely difficult to work with and overbearing to subcontractors." [#18]
- The female majority owner of a non-certified specialty construction company said, "There are prime contractors that [our company] won't work with. [A prime contractor that] is not honest, doesn't pay when [it] promises. [It] doesn't stand by [its] word." [#30]
- The Pacific Islander owner of a DBE-certified engineering and specialty construction company said, "[Prime contractors that my firm doesn't like to work with] will take a bid and then never contact [it] again. A bid can cost [my firm] \$10,000 to \$20,000 or more, [so when it is not taken seriously by the prime contractor it hurts]." [#37]

One interviewee said that the factors that make a good prime contractor include not discriminating and not engaging in sexual harassment. A female representative of a majority-owned specialty contracting business indicated the company works as a prime contractor for utility companies and as a subcontractor for construction companies, which do roadwork or other work that affects traffic. Referring to her key clients, she said, "These companies are easy to work with, pay on time, treat flaggers fairly, don't discriminate and there is no sexual harassment. There are a few companies that we don't work with because of poor communication or lack of respect for flaggers." [#14]

Subcontractors' methods for obtaining work from prime contractors. Interviewees who worked as subcontractors had varying methods of marketing to prime contractors.

Some business owners and managers rely on repeat customers and word-of-mouth to obtain work from prime contractors. Examples of those comments include:

- The white male owner of an SBA-certified specialty construction company said, "[My company] doesn't even have a listed phone number, but it has long-term clients. [My company has] worked with [some of the same clients] for 20 years. ... Repeat customers and word-of-mouth [drives the business]." [#21]
- According to the white male owner of an SBA-certified specialty construction company, "[The company gets subcontractor work] typically by word-of-mouth. [Its subcontractor work] is usually with prime [contractors that the company] has worked with before and they contact [it] to ask for a bid." [#25]
- A representative of a majority-owned specialty contractor reported that the firm marketed through word-of-mouth and the owner's network and connections. [#14]

- The Hispanic American co-owner of a construction company said that "Prime contracts keep coming back to [my company] because [it] provides a great product, and it's good at what it does." [#26]
- The female co-owner of a non-certified construction company said that her company gets jobs as a subcontractor by having good relationships with prime contractors the company has worked for in the past. She said, "[The company] doesn't do much marketing [to prime contractors]. It's mostly word-of-mouth and through the Internet. [The company] does belong to the local contractors' association." [#24]
- The white male owner of a survey company said, "[My firm] gets subcontractor work by being contacted by a prime contractor who has won a contract, like to build a school, and needs [surveying and staking] done. [The prime contractor finds my firm] because [the prime contractor] is local and knows of [my firm]." [#5]
- The white female co-owner of a non-certified construction company said, "[Our company] does some work as a subcontractor. We have relationships with other prime contractors that go back over 20 years. [Our company] is trusted to get the job done." [#31]
- The white female owner of a DBE-certified specialty contracting company said, "[The company] really doesn't do much marketing. [It] gets a lot of work from the municipalities [My company] works on jobs [for those agencies] with the prime [contractors], and the agencies [like the work my company does]. When a prime contractor gets a job with the city or county, the people at the agency say, 'You need to call [my company], [it] can do [specialty work].' It is word-of-mouth. [The company] is a member of [the Association of General Contractors]... but it's pretty much word-of-mouth between prime contractors and government agencies."

She also said that she sends letters of introduction to prime contractors with which the company has not worked before, along with the bid. "It gives a little [company] history and references [from previous projects]." She also added, "[Some prime contractors that use my company for public sector work also use it for private sector work because my company offers] good service and dependability." [#12]

Similarly, some business owners said that it was very difficult to solicit business from certain prime contractors because those contractors are going to automatically use the subcontractors they already know. Those comments included the following examples:

- The female owner of a DBE-certified specialty construction firm said, "In the private sector, the [prime contractor] usually calls [with a job offer]. I don't go looking for that work. It's not advertised anywhere usually. The [prime contractor] pretty much has the companies [it] is going to work with so there is no reason to go out looking for that kind of work." [#27]
- The African American owner of a non-certified consulting firm said, "Yes, [as the firm's owner] I try to establish some relationships, but [it is] hard to penetrate, very hard to penetrate, especially the major firms around here." He went on to say that some prime contractors know his business and his capabilities, and will call him with subcontract work. [#4]

- The white male owner of a construction firm reported that he identifies subcontracting opportunities through referrals and by identifying RFPs that include his type of work. He said that he has tried marketing to prime contractors and has been minimally successful. He said that just like his company, each prime contractor has favorite subcontractors that it is used to using and with which it has good relationships, and his company's only opportunity to get a subcontracting job in that case is when the prime contractor is looking to replace one of its "normal" subcontractors. He said, "Sometimes you have to buy a lot of beers to get into the club," when discussing his efforts to build relationships with prime contractors."

 [#22]
- A discussion participant reported that he counsels DBE firms to build relationships with prime contractors, but representatives from the DBE firms complain that "the prime contractors consistently use the same firms over and over again Those DBE firms that are not being engaged now feel that it is the same firms being used over and over again, they are not expanding their pool of available DBE firms. 'How am I even going to break the ice, get into the marketplace, if they keep using the same firms, over and over again?'" [DBEP#3]

Some business owners said that they actively market to prime contractors. Those businesses reported that they sometimes identify prime contractors from bidders' lists, planholders' lists, at pre-bid or pre-proposal conferences, or through outreach events.

- The Subcontinent Asian American male owner of a certified engineering firm said that his company gets jobs as a subcontractor by introducing itself to potential primes. "The main way to get on a project is to introduce yourself to the different companies and different project managers." He went on to say that, once his firm established a reputation, the word spread to other project managers and his firm began getting more calls to bid on work. The business owner also talked about attending outreach meetings to learn about new projects and to meet primes and project managers. He said, "There [are] a lot of preproposal meetings for these large projects. That's a lot of the reason that we focus on [a particular public agency's] projects. They'll advertise [the pre-proposal meeting]. You hear a little spiel from the owner about the project and then [you can] identify the primes and go around and talk to these primes." The firm owner went on to say, "That's one thing I like about the DBE goal percentages. It forces the primes to ... allow different firms to come into their radar." [#10]
- A white female manager of an MBE/DBE/SBA-certified engineering company stated, "Mostly [our company] contacts [firms we think will propose as] prime [contractors] about having [our company] participate as a sub[contractor]. There have been times when the [prime contractor] has contacted [our company]. To be honest, there aren't very many engineering firms that are MBEs or DBEs. But [our company] is usually the one to contact the [prime contractor]."
 - She continued, "Sometimes on large projects, if there are four or five large firms going after the job, [one or more] will contact [our company] about being exclusive to one team. If we agree to that, we are gambling that [our company] will be on the winning team. If that team is not successful, then [our company] doesn't get anything out of it." [#9]

- The white female CEO and co-owner of a WBE-certified construction company said, "[The company markets to prime contractors] by first identifying [the prime contractors] from the bidder's list. Most of the time, [the company contacts prime contractors] that [it] has worked for before or has knowledge of." [#11]
- Managers of a Native American-owned, DBE-certified engineering firm said that their firm obtains subcontracts through relationships, being aware of a project, because of geography or size, and its own expertise and capabilities. "We will approach the prime contractor and say, 'Hey, [our firm] brings this advantage to your team.' Sometimes [the firm] is successful putting that together." However, they did not think their firm has been very good at marketing to prime contractors. "Making that connection is difficult." [#6]
- The white female owner of a DBE-certified specialty contracting company said, "[The company looks for work as a subcontractor by] purchasing plans and getting on the planholders' lists. [That is different in the private sector]. In the private sector there really isn't a place you can go and say, 'Hey, [my company] is available.' There may be a posting on the Internet, looking for service companies. The [owner or prime contractor] has to get a construction permit from the State or local government and might say '[Our company] doesn't do this kind of work. ..., who do you recommend?' " [#12]
- The white male owner of an SBA-certified specialty construction company explained, "[I usually identify primes] from a list of interested bidders. For example, I could go on to FedBizOps [on the Internet] to see a list of interested vendors. [I have looked at WSDOT's lists] but I don't spend a lot of time [there] due to the fact that WSDOT has criteria in place that I don't think [my company] can meet." [#25]
- Representatives of a large publicly-owned concrete company said, "Most private jobs are not advertised the same way. Generally, [private sector prime contractors or owners] call [our company]. Sometimes they are on Builder's Exchange Washington." [#15]

Some business owners said that they are routinely solicited for bids from prime contractors and do not need to pro-actively market to them. Examples of those comments include the following:

- The co-owner of a concrete company said, "All of [the company's] work is bid jobs. [The company] belongs to a couple of different plan centers. [The company does not] really market its jobs too much. A lot of people call [them] and solicit bids from [the company], and it's pretty much a low-bid market." [#17]
- The general manager of a woman-owned, DBE-certified specialty contracting company said, "[The company gets work as a subcontractor] by following up on advertisements at the plan center or the WSDOT website or getting calls or faxes from companies soliciting DBE quotes. [That process is the same for private or public sector jobs]." [#18]
- Representatives of a large publicly-owned concrete company said, "[The company gets on jobs as a subcontractor] by responding to RFQs, and there's the MSRC, [and] small works rosters. WSDOT sends out bid information and [the] Internet [has bid information]. [It] tries to get on every small works roster. [Agencies] seem to be gravitating towards [using those rosters]." [15]

D. Keys to Business Success

The study team asked firm owners and managers about barriers to doing business and about keys to business success. Topics that interviewers discussed with business owners and managers included:

- Employees (page 37);
- Equipment (page 40);
- Access to materials (page 42);
- Financing (page 44); and
- Other factors (page 48).

Employees. Business owners and managers shared many comments about the importance of employees.

Many interviewees indicated that high-quality workers are a key to business success. Examples of such comments include the following:

- The Subcontinent Asian American male owner of a certified engineering firm said that for a firm to stay competitive now, it needs quality employees. He went on, "On the engineering side, [success is] purely the qualifications the firm has as long as they can show that they retained [employees with] a solid knowledge base." [#10]
- The female representative of a majority-owned specialty contracting business said that the company does well because their employees are "well trained, reliable, don't complain, and do a good job. These traits bring value to our customers." [#14]
- When asked what it takes to be competitive in the business, the co-owner of a concrete company said, "A good crew [is needed to be competitive]. Our business is all about the people that work for [the company] the skilled craftsmen." He further explained that "being prepared for the work [that is] coming up, having the right people and right equipment in place before you start [is critical]." [#17]
- A Hispanic American co-owner of a construction company said that the firm's success was in part due to hiring "some really good people." When asked what it takes to compete in the marketplace, he said, "[It takes] guts and trust. You need to trust yourself and your workforce Trust your men, that they can perform the work." [#26]
- The female manager of a woman-owned, DBE-certified construction company said that to be competitive in this line of work "takes having great employees. [The company] has to have the equipment and the knowledge. [It has to have personnel who] know the paperwork and have some people skills." [#19]
- Many other business owners and managers made similar comments about the importance of quality employees. [for example, #18,#24, #27, #28]

Some business owners and managers said that it was difficult to find and hire skilled employees. They attributed that difficulty to several factors:

- The co-owner of a concrete construction firm said that getting skilled craftsmen is a challenge for his company. [#17]
- When asked if getting qualified workers is a barrier, the white male general manager of a general contracting company said, "Yes. Since [the company] is union, the union workforce is aging and [the union] has difficulty finding qualified people." [#33]
- The female manager of a woman-owned, DBE-certified construction business said that it is extremely difficult to find employees who know about the firm's particular line of business. Outside of that specialty, she does not have difficulty finding employees. [#19]
- The white male representative of a woman-owned, non-certified construction company said, "It would be easy to find labor. Finding qualified personnel is totally different." [#34]
- Other business owners and managers also made similar comments. [for example, #5, #18 and #20]

Some interviewees reported no barriers related to getting qualified personnel. Examples of those comments included the following:

- The white male owner of a construction company said, "[Getting qualified people] is not real difficult right now. There are a lot of people on unemployment." [#22]
- The African American owner of a DBE-certified trucking and specialty contracting company said, "[Finding personnel] actually boils down to personality and charm. I've always been able to find educated, smart people." [#36]
- Other business owners and managers also made similar comments. [for example, #23, #23, #24, #29, #12, #13, #16]

Many business owners commented on what they saw as a declining quality of workers. For example:

- When asked if getting good personnel is a barrier, the white male owner of a construction materials supply company said, "[Yes], it's harder. The drug scene is bad, [there is] thievery, just the total make-up of the person, not showing up for work, being lazy. There's a whole different breed of people out there than when I started this." He said most of the current employees have been with the company for a number of years. [#2]
- The white female CEO and co-owner of a WBE-certified construction company said, "There's also a change in the work ethic. That's huge. In my generation it was totally different. [The company also] does a pre-hire drug screening and also post-accident screening. [It] just tried to hire a new fellow a couple of weeks ago, and I told him right up front that he would have to pass a drug test. [The applicants think they can] go in and fool the test. [He failed and didn't get hired]." [#11]
- The African American owner of a DBE-certified specialty contracting company said, "Finding quality workers is a problem for every [company]. Everybody wants a job but no one wants to work." [#35]

A few company owners and managers said that government screening requirements were a barrier when trying to obtain employees for certain public sector contracts. For example, a female representative of a majority-owned specialty contracting business indicated getting good people is a huge problem for the company. She explained, "For example, we needed flaggers to work on the Navy base. Fifty people were not able to get a pass because of their personal histories. It's hard finding qualified, dependable, clean, and sober people." [#14]

Some owners and managers said that being union employers helped them find workers. For example:

- The co-owner of a concrete construction firm said that his company is union, and that finding qualified employees is not a barrier. [#17]
- The female manager of a woman-owned, DBE-certified construction company said that her firm has been a union shop for many years and does not have problems working with unions. "[We] get a lot of great people out of the union halls." [#19]
- The white female owner of a DBE-certified specialty contracting company said, "Right now [the company] is in labor negotiations, so it [feels like working with the union is] a barrier. But, really, [the company] needs the union. I don't think [it] could get enough [qualified employees] without calling the union hall." [#12]

Some business owners and managers said that they preferred to have control over employee hiring, or had negative experiences with unions, and did not want to be union employers. For example, Interviewees #2, #18, #27, #30 and #35 said that they preferred to not be union employers.

Some firm owners and managers indicated that hiring and retaining employees was more difficult for small businesses than for larger companies. For example:

- When asked about whether obtaining personnel was a barrier, the Subcontinent Asian American male owner of a certified engineering firm said, "The key [to retaining employees] is maintaining a good backlog, and a good project base, because if you don't have a lot of work out there, employees get kind of nervous about job security. Then, if they see job openings out there, they [may] move to get more stable."
 - He also said that a larger firm may have an advantage in attracting good personnel, because the employees might have a sense of more job security. In practice, he said that the larger firms are quick to just cut employees loose if they are not billable. [#10]
- When asked if finding personnel is a barrier, a white female manager for an MBE/DBE/SBA-certified engineering company said, "Yes, finding qualified engineers is a challenge on a compensation level. [Our company] can't afford to pay what the larger firms pay. But it takes different people to go into a smaller company [rather than a larger firm]. [Our company] doesn't generally get involved in the large bridges, [for example], so if that's what someone wants, [he or she] needs to go to the larger firms." [#9]
- The female manager of a Native American-owned, DBE-certified construction company said, "It's hard to find trained workers. [The company] cannot afford to hire a project manager. There's just no way. [Its] pricing doesn't allow for that." [#32]

- The white female co-owner of a non-certified construction company said, "Getting personnel can be a problem if [the company] gets a big job. There are people out there, but I'm not sure [the company would] want to hire them." [#31]
- A female representative of a majority-owned specialty contracting business said, "Another issue with personnel is that [the company's] work load is inconsistent, so we can't really offer full time, consistent work to people." [#14]
- The African American owner of a MBE/DBE-certified engineering company explained that one of the issues that his company has as a small consulting firm is that it will hire an engineer to fulfill a specific contract, and then the contract will get delayed quite a long time, several months sometimes. Because the new engineer would be hired specifically for that particular contract, he or she may not be available when the project actually starts. [#8]
- The Asian-Pacific American owner of a DBE-certified engineering company reported, "Attracting personnel could be called a barrier because larger firms are able to give larger financial incentives for personnel than small businesses. I don't know if this is a barrier or just a competitive thing." [#3]
- The female Asian American principal of an Asian American-owned, MBE/DBE-certified engineering company said, "It's really hard to hire people. When the economy was great, in [the] early 2000s, we wish we could have grown because we had projects and we could have hired people, and no one would even respond [to our ads], because all the big firms were hiring too and the [job applicants] would rather go with the big firms the name recognition and small firms had great difficulties. When the recession hit, a lot of people were laid off [and it was] easier for small firms to get applicants. It is hard to hire and compete against big firms." [#1]
- The African American owner of a non-certified consulting firm said, "Yes, [since the company cannot get a] loan, to give us a window to pay up ... our obligations, [obtaining personnel] is really a barrier. [The firm] doesn't want to hire someone that [it] cannot pay." [#4]

Equipment. Some businesses, especially in construction, require a substantial amount of equipment to perform their work. Some own their equipment and some rent equipment.

Some businesses reported that they own certain equipment and then rent larger pieces of equipment that they may infrequently need. For example:

- When asked if acquiring equipment is a barrier, the female manager of a woman-owned, DBE-certified construction company said, "Currently [the company] rents the large equipment that [it] needs, like boom trucks. Other than that, [it] has the equipment that [it] needs." [#19]
- The African American owner of a DBE-certified trucking and specialty contracting company reported, "[The company] leases excavating and loading equipment [it] needs on a per-job basis. [It] owns some trucks. [It] does a lot of trade-out with other DBE companies." [#36]

Other interviewees said that they own all their equipment. For example, a minority female coowner of a non-certified construction company said, "[The company] does enough business that [it] has purchased [its] own equipment. Now [the company] doesn't have to rent equipment and the work is more profitable." [#28]

Some interviewees stated that acquiring needed equipment is not a barrier. [for example, #24, #31, #11, #13, #16, #18, #34, #20, #25, #27, #33, #35] Examples of those comments included:

- The white male owner of an SBA-certified specialty construction company said, "My [company] started out with one piece of equipment, just a Cat, and worked up [from there]. When [it] could afford it, [it] bought something else. [It now] has three trucks, four excavators, a Cat loader, and a dozer, and roller. [It] has the major pieces that [it] needs. "[In the beginning], I'd go in and get a [personal] loan, and then I worked nights ... to help pay for it. I've really watched [company] expenses, and [it] doesn't [buy] a lot of toys. My [company] never had any trouble getting equipment." [#21]
- The Hispanic American owner of a non-certified construction company said that he doesn't like to rent equipment. He has been purchasing equipment on time payments and has only two more payments to go. [#29]
- When asked if obtaining equipment is a barrier, the white female owner of a DBE-certified specialty contracting company said, "No. [My company] financed a lot of equipment over the years. Even though [it] was a corporation, as long as I gave a personal guarantee, there wasn't a problem." [#12]

Some companies, especially certain types of engineering firms, indicated that equipment is not a barrier because they require little equipment for their lines of work. For example:

- The female Asian American principal of an Asian American-owned, MBE/DBE-certified engineering company responded that obtaining equipment is not a barrier to success, "...because we don't do surveying, most of our equipment is just computers." [#1]
- The African American owner of an MBE/DBE-certified engineering company answered, "No, [my firm] isn't very equipment based. I just go down and buy what [the firm] needs, although licenses for software can be a bit expensive." [#8]

However, some business owners reported that obtaining expensive equipment is a barrier.

They reported that they did not have the cash to purchase the equipment outright and that financing can be a barrier. For example:

- The female owner of a DBE-certified construction company said that the barriers associated with obtaining equipment for small businesses are all related to financing. [#40]
- The white male owner of a construction company reported that getting needed equipment is no problem if your company has the cash. He said that obtaining equipment was a problem for his company "because [my company] is not backed by a group of money, [it] relies on my [personal] resources. My limited resources have been a roadblock to growing larger. There's more potential out there for [this company]. Smaller purchases under \$3,000 have not been a hindrance, but larger purchases have been." [#22]

- The Hispanic American co-owner of a construction company said that the company rents most of its equipment. But, he adds, "It was difficult to get a line of credit with the rental companies. So, [the company's] plan was, once [it] does make some money, [it can] buy one fork lift so [it] doesn't always have to rely on the rental company. So [that is what happened]. [The company] still owns [its] first fork lift it's falling apart, but [it is] just used here." [#26]
- When asked if obtaining equipment is a barrier, the African American owner of a non-certified consulting firm said, "Yes, it is a barrier sometimes, especially the pricey [items like] measuring equipment [and] generators. [As owner of the company I] put up my own personal money to get it." [#4]
- When asked if obtaining equipment is a barrier, the African American owner of a DBEcertified trucking and specialty contracting company said, "This has become a barrier because of financing." [#36]

Access to materials. As with other potential barriers, interviewees reported a range of experiences with access to materials.

Some business owners and managers said that their ability to obtain credit or having sufficient cash on hand were factors in accessing materials and supplies, especially if they were not receiving timely payment from customers or prime contractors. For example:

- The female manager of a woman-owned, DBE-certified construction company indicated that she had difficulty receiving timely payment for materials on hand. "It's difficult to get paid for the materials, so I have to have the cash flow to finance the materials myself." [#19]
- The white male owner of an SBA-certified specialty construction company reported, "When [my company] did a water line installation for [a college], there was over \$100,000 in supplies needed for the job that [it] could not pay for. [My company] negotiated with a supply house for the supplier to wait for payment until [it] was paid [by the owner]." [#21]
- The Hispanic American owner of a non-certified construction company said that he had problems obtaining supplies when he started his company. He reported that he doesn't currently have problems with materials and supplies. "Now that they know me, they have no problem with just invoicing me." [#29]
- When asked if obtaining inventory or supplies is a barrier, the African American owner of a DBE-certified trucking and specialty contracting company said, "Yes, it takes credit." [#36]
- The female manager of a Native American-owned, DBE-certified construction company stated, "Getting inventory and supplies is a problem for small businesses, especially if the prompt payment law is not followed." She added that she did not see a difference for minority-owned businesses in obtaining supplies beyond size of business. [#32]
- The white male owner of a construction company said that he has not had difficulty obtaining materials and supplies. "This has not been an issue for [my company], because I have really good credit with the vendor companies. [Each vendor] sets [its] own credit requirements, differently than a bank. If your [company] pays all [of its] bills on time, in full, the [vendor] is more than happy to sell to [it] up to [the vendor's] credit limit, [whereas] I don't know if [my company] could even get a \$1,000 loan from a bank." [#22]

Regarding obtaining inventory or supplies, the African American owner of a non-certified consulting firm said, "[This is] not a barrier yet. We have a private equity company that helps with that. But across the board it can be a barrier [to some other small firms]." [#4]

One minority business owner who participated in a public hearing reported an instance of several suppliers refusing to do business with his firm. The time frame for the incident was not clear in his account: "A paving association in the [area] ... where we were doing most of our paving [contacted us]. ... At that time, I thought that we were doing very well and being successful that they were going to ask me to join their association ... instead, we went into the back room and five of the biggest paving plants and gravel companies in the ... area [told] me they didn't want a DBE contractor in the paving business and told me that they weren't going to sell me anymore asphalt, and that I needed to get out of the paving business if I wanted to stay in business. So, I got out of the paving business ... but that was a shocking experience when you think you are going to be invited to join an association and then be asked to get out of business and that they are going to boycott you." [VNP#3] He added in his written comments, "As a result, [my company] sold off the paving equipment it had acquired and in the ... years since, [my company] has not acquired any paving equipment or self-performed any significant paving work." [WT#5]

In general, minority and female business owners did not report instances of racial or gender discrimination by suppliers. Anecdotal evidence of disadvantages for minority- and womenowned business in obtaining materials and supplies in many cases related to the size, credit, and capitalization of those firms. One comment from a minority business owner regarding predatory practice came from the interviews, but he did not attribute the supplier's behavior to discrimination. The Hispanic American owner of a non-certified construction company reported that he will get a quote of one price, and the price will be different when he gets the invoice. "Sometimes [after establishing a relationship] with [a supplier], [I] just [call and place an] order and [get] sent a bill, and I check the bills and ... I have to make them fix it [because of inflated prices]," he said. "I think they do it to everybody." He did not consider it a discriminatory practice, just a predatory business practice. [#29]

Interviewees also mentioned the variability of materials prices as a barrier. For example, the white male general manager of a general contracting company reported, "It's more difficult now than it has been in the past. There are so many fluctuations in pricing right now. [Suppliers] will not hold the price very long anymore." [#33]

Obtaining inventory or other materials or supplies was not seen as a barrier to success by a several interviewees. [for example, #24, #31, #1, #11, #15, #16, #18, #20, #21, #30, #34, #35] For example, The female majority owner of a non-certified specialty construction company said, "No, [obtaining inventory or supplies] isn't a problem. [The company] has pretty good suppliers. [It] has a good reputation with [its] suppliers." [#30]

Some business owners said that having an efficient inventory management system was important for their success. For example, when asked if obtaining inventory or supplies is a barrier the white female owner of a DBE-certified specialty contracting company said, "Yes, [obtaining inventory can be a barrier]. [The company] didn't have an inventory system until this

year. [It] has buildings that [are full of materials. [The company] set up a new inventory system this winter and I hope that helps." [#12]

Financing. As with other issues, interviewees' perceptions of financing as a barrier depended on their experiences. To some it was a barrier, and to others it was not.

Many firm owners reported that obtaining financing was important in establishing and growing their businesses (including financing for working capital and for equipment), and surviving poor market conditions. For example:

- The Asian-Pacific American owner of a DBE-certified engineering firm said that having a line of credit was important to his company remaining in business. "When [the firm] needed to have money to keep going because of no pay or slow pay, [it] had a line of credit. [The firm] just renewed it this year. In the last two years or so, [my firm] had to write off more than \$100,000 in bad debt because clients went bankrupt and [the firm] did not get paid for work completed." He went on, "If it weren't for the line of credit and personal financing, I think [the firm] would have had to close the doors." [#3]
- The Hispanic American co-owner of a construction company had similar comments about financing, specifically "obtaining more money because of lack of cash flow. Luckily, my company had a good bank, who we are still with, and they loaned us some more money." [#26]
- The vice president of a small DBE construction firm wrote that their bank froze their company's line of credit (in July 2011) and that banks are not loaning to small businesses. "We have contacted over a dozen banks and financing companies since last November and still cannot find one that is willing to help us stay in business." As a result, she reported, "The bigger DBE contractors are taking over the projects, because they have the money to do so, and they are growing exponentially! Meanwhile, the smaller DBE businesses are going bankrupt or calling it quits." She urged the state to focus more assistance on small DBEs. [WT#6]

Some firm owners and managers reported that obtaining financing was not a barrier, and some said that it was. Differences in answers were in part attributable to whether firms were construction or engineering companies, and whether the businesses were well-established. For example:

- The Hispanic American owner of a DBE-certified engineering firm said that obtaining financing was not a barrier for his firm. However, he said that it is different when a company is growing. "[It] has to establish a relationship with a financial group so that when [it] gets there, the [financial group] will help [it]." [#7]
- The Asian-Pacific American owner of a DBE-certified engineering company reported that he has not had any problems getting a line of credit, but acknowledged that if he "had to borrow a half million dollars, [he] probably couldn't because [he] doesn't have enough collateral for that." [#3].
- The female Asian American principal in an Asian American-owned, MBE/DBE-certified engineering company said, "[My firm] has not had problems with financing. [Its] balance

- sheet is strong. I can see where a brand new firm would find getting financing almost impossible." [#1]
- Some of the other owners and managers of minority- and women-owned construction and engineering firms indicated that obtaining financing is not a barrier. [for example, #9, #10, #12, #16, #18 and #35]
- A manager of a majority-owned construction materials manufacturer also reported that obtaining financing is not a barrier. [#23]

Some interviewees said that they had difficulty obtaining financing when starting their companies, but that financing was no longer a barrier for them. For example, the co-owner of a concrete construction company reported that financing was a barrier when he and his wife first started their firm. "It was challenging in the early days." He said that his company, which is now more than 10 years old, has a good relationship with a bank and that he is comfortable with his financing now. [#17]

A number of business owners and managers said that obtaining financing continued to be a barrier for their companies. For example:

- The Native American owner of a DBE-certified construction company wrote, "In recent years, [my company] has struggled with providing collateral for its line of credit. In the past, its lenders would allow it to borrow against its receivables. However, in the past couple years, its lender has refused to count any receivables on projects where [my company] has been required to post payment and performance bonds. As a result, [my company] has had to scramble to provide alternate collateral to offset the lender's refusal to consider the receivables from these bonded projects. Dealing with its line of credit has been a challenge. For many small, minority or women owned firms, coming up with other unencumbered collateral is extremely difficult." [WT#5]
- The female owner of a DBE-certified construction company reported that she has significant personal assets, including her house, but banks will not loan her money. "So therefore, I'm completely reliant on general contractors to pay me right and to pay me on time." She went on to say that obtaining financing is a "huge" barrier for small businesses. "Even if my credit wasn't trashed ... I still wouldn't be able to get a loan, because construction's risky, because start-ups are risky, and the real estate market has declined" [#40]
- A female representative of a majority-owned specialty contracting business said that obtaining financing is definitely an issue. [#14]
- A female manager of a woman-owned, DBE-certified construction firm said that obtaining financing can be a barrier. "With the market going down, it's harder to get the financing to get equipment." [#19]
- The white male owner of a construction company reported that obtaining financing can be a barrier. "For a company the size of mine and with a history like mine, it is impossible to get a small business loan for infrastructure and equipment." [#22]

- The female co-owner of a non-certified construction company said, "Yes, [obtaining financing can be a barrier]. When things went south, the credit went with it. Just when [the company] needed credit [it] couldn't get it." [#24]
- When asked if obtaining financing is a barrier, the white female CEO and co-owner of a WBE-certified construction company said, "Yes. [The company] had such a bad year in 2010 that the bank wasn't willing to help [it] out with some equipment [it] had to have last year. Since [the company] had a better year in 2011, [it] is back to where [it] can use company financing again. I'm pretty fiscally responsible." [#11]
- The female owner of a DBE-certified specialty construction firm reported, "[Yes]. Depending on where the company is financially, financing is unattainable for one reason or another. If [the company] is able to attain it, it's very expensive, especially if [the company] really needs it." [#27]
- When asked if obtaining financing is a barrier, the female majority owner of a non-certified specialty construction company said, "Yes, financing has been very difficult the last few years. Our company hasn't applied for financing but I helped another company and [the banks] just don't want to loan yet." [#30]
- According to the female manager of a Native American-owned, DBE-certified construction company, "[Obtaining financing is a problem], it doesn't matter if your [company] is a minority certified company or not. As a small business, banks are not loaning to [your company] if [it] does not [already] have money. I've been working on [getting financing] since last July, to find some financial help." [#32]
- When asked if obtaining financing is a barrier, the white male general manager of a general contracting company said, "Yes, it has been. It's all market driven, it seems." [#33]
- When asked if obtaining financing is a barrier, the African American owner of a DBE-certified trucking and specialty contracting company said, "Yes, for everyone. [My company has been] denied. This is in general, for DBEs and even for non-DBEs. [I believe that this is discrimination because] if [small DBE firms] don't get work and are underutilized year after year after year, and can't be consistent with sales, how are the banks going to be paid back? [It is third party, indirect discrimination]." [#36]

Some business owners explained the connection between personal assets and the ability to obtain financing. For example:

- The white female co-owner of a non-certified construction company said, "Yes, [obtaining financing can be a barrier]. When the downturn came, [our company's] bank got stricter with the credit line. We, [as owners], were forced to use our home equity as collateral for financing. The good news is that fees and interest rates are lower [than in the past]." [#31]
- The African American owner of a non-certified consulting firm said "[Yes, obtaining financing is] a big [barrier]. Banks are very reluctant. They think [that small business] is [a] big risk for them, even though we may demonstrate to them what we are capable of doing. Also, with a lot of real estate underwater, it's hard even [for the business owner] to use [his or her] personal home as equity to obtain a loan. The only equity that a small company can have is the power of its [personnel's] knowledge and experience, but banks don't consider that as collateral." [#4]

- The African American owner of an MBE/DBE-certified engineering company said, "[My firm] has been lucky in that [it] hasn't had to try to find financing. When I opened the business I had a term loan through Community Capital. Fortunately, before the 'crash,' I changed that to a line of credit on my house. I had my financing in place before the crash. [My firm] has been able to use [that] line of credit as [its] needed to. It hasn't been that big of a problem for [my firm]. I know other folks in the industry for which this is a huge problem, because if your company didn't have [its] financing lined up before the crash, [it] couldn't get it afterwards." [#8]
- The white male owner of a specialty contracting company said, "Yes, oh yes. As an owner-operator in this business, I only own my equipment, and the banks won't loan on equipment. I must finance my business with credit cards and personal loans." [#20]
- The white male owner of an SBA-certified specialty construction company that also counts equipment as its main assets reported, "I've always [personally] financed my [company]. I've had all kinds of offers for financing. So, no, I haven't seen any problems there." [#21]
- The Hispanic American owner of a non-certified construction company said that his personal credit is not good. "I lost a house in California," he explained. He applied for a business loan from a bank and was turned down. Obtaining financing has not been possible for him, which he identified as a barrier. [#29]

Some interviewees reported that their companies had never tried to obtain financing. For example, the white male representative of a woman-owned, non-certified construction company said, "No, [financing is not a barrier because] I never tried to obtain financing for the business." [#34]

Some minority and female business owners reported no instances of discrimination in obtaining financing. Many business owners indicated it was difficult for small businesses to obtain financing, and that the ability to access business loans was affected by personal wealth. (However, business size and personal equity may be affected by race or gender discrimination.)

However, some minority and female business owners indicated that race- and genderdiscrimination affects financing. For example:

- A discussion participant at an association meeting reported on feedback from the local construction contracting community, "Certainly, access to capital, bonding, and insurance is something that everybody in the industry is struggling with now but definitely research has shown on a national level that minorities in particular are discriminated against often times more so than white business owners in obtaining financing, etc." [DBEP#1]
- The African American owner of a DBE-certified specialty contracting company reported discrimination in financial markets. "That's financial, in the banking and loan area. The only time minorities can get a loan is if [it is not needed, yet non-minorities can get a loan if needed]. I ran into this with my first company and saw what was going on, when my financial position wasn't as strong. I saw this and worked hard to get my financial position in order and have had no problem getting financing since." [#35]
- The African American owner of a DBE-certified trucking and specialty contracting company said that discrimination affects companies, which then affects their ability to obtain

- financing. He said, "If the company doesn't have work and can't keep money in the bank, [it] loses [its] credit rating, [and then can't get the financing that it needs]." [#36]
- The African American owner of a non-certified consulting firm said, "It's also hard to get lenders to loan money to small businesses, a real problem. Loan companies are less likely to approve loans to small minority companies, even more so now than before [the economic downturn]." [#4]
- The Native American owner of a DBE-certified construction company wrote about the forms of discrimination he has experienced as a business owner. "As an example, many businesses are often turned down for credit or have difficulty obtaining lines of credit"

 He indicated that he has no direct ability to prove that his difficulties were tied to his status as a minority, "I firmly believe that as [a] minority, I have had to work harder to prove I am capable of performing the work in order to obtain necessary credit" [WT#5]

Other factors. Beyond the factors identified above, many business owners brought up reasons for business success pertaining to overall management and reputation of the firm.

A few business owners specifically mentioned "reputation" and strong relationships with customers and other firms as factors for continued success. Examples included:

- When asked what it takes to be competitive in today's marketplace, the female Asian American principal of an Asian American-owned, MBE- and DBE-certified engineering company said, "It's all about relationships. To try and unseat [a company with an established relationship with the prime contractor] off a ... engineering job is nearly impossible, so you have to keep the clients you have. I honestly think that working for the [prime] contractor has saved us." She went on to say, "Most of [the firm's] work is for repeat clients, because [our firm] does good work; [it] gets invited to be on the team again." [#1]
- The white female CEO and co-owner of a WBE-certified construction company said, "[A company] has to know what [it] is doing, it has to do it well, and work the relationships. [It] also has to do it at a competitive price." [#11]
- When asked what it takes to be successful in her business in this market, the white female owner of a DBE-certified specialty contracting company said, "Dependability and reliability." [#12]
- A minority female co-owner of a non-certified construction company reported, "[Our company] has built a good reputation and can perform the work cost effectively. The key is to clean up the space, not just how fast it can be torn down. [Our company] has a good system for separating the demolished materials and using [its] machines effectively." [#28]
- When asked what it takes to be competitive in his firm's line of business, the white male owner of a specialty contracting company said, "Fair prices, honest billing, [and] trained operators that act like operators, not drivers. Well-maintained machinery. This gets [my company] the job every time." [#20]
- When asked what it takes to be competitive in the current market, a minority female coowner of a non-certified construction company said, "[Our company] provides great customer service. [It] gets repeat business and good referrals." [#28]

- The Hispanic American owner of a non-certified construction company says that to stay competitive, he must deliver "quality, yes, and people want you to be honest with them. [Those are] the most important things." He explained, "I call the customer back within a couple of months and normally stop by." He went on to say that 50 percent of his work is referrals. [#29]
- The Native American co-owner of a construction company attributed the company's success to customer service, long-term employees, and good pricing. In his words, "[A company] definitely needs to be priced well, but at the same time [it] has to provide that customer service that is going to assure the customer [it is] doing the best [it] can and [it] will come back [when needed]." [#16]
- The white male general manager of a general contracting company said, "[To be competitive, a company must have] diverse business lines, be innovative, and have a good reputation. Good relationships [are important too.]" [#33]
- The white male owner of an SBA-certified specialty construction company said his company has grown steadily over the years and the growth has been due to a good management approach. He said, "My company is my investment and it's my name, it's my everything." [#21]

Related factors — discipline and perseverance — were also mentioned by firm owners as keys to success. Examples of those comments include:

- The co-owner of a construction company spoke about what it takes to compete in the marketplace. "It takes discipline to not spend your money. To live within your means and know that you won't have constant cash flow." He went on to say, "If you can get [your company] prepared, and go to a general contractor, who's a global contractor, and say 'Here's my [company's] safety plan, here's my [company's] work plan This is what [my company is] going to do for you.' [That work takes] some time ... but it shows [the prime contractor] that [your company is] willing to step up to their court." [#26]
- A white female manager for an MBE/DBE/SBA certified engineering company said to be competitive and to survive in this market "takes perseverance and dedication." [#9]

E. Potential Barriers to Doing Business with Public Agencies

The study team asked interviewees about potential barriers to doing work for public agencies, including WSDOT. Topics included:

- Learning about work and marketing (page 50);
- Bonding requirements and obtaining bonds (page 53);
- Insurance requirements and obtaining insurance (page 57);
- Prevailing wage requirements (page 59);
- Prequalification requirements (page 61);
- Licenses and permits (page 63);
- Other unnecessarily restrictive contract specifications (page 64);

- Bidding processes (page 66);
- Non-price factors public agencies or others use to make contract awards (page 68);
- Timely payment by the customer or prime (page 69);
- Taxes (page 76); and
- Experience with WSDOT processes (*page 77*).

Learning about work and marketing. Interviewees discussed opportunities for firm owners and managers to identify public sector work and other contract opportunities, and to market themselves in the in-depth anecdotal interviews.

Many business owners and managers reported that it is easy to market in general and, specifically, to learn about public sector work. [for example, #40, #29, #11, #12, #15, #18] Examples of those comments included the following:

- The manager of a woman-owned, DBE-certified construction company said that WSDOT projects are easier to find than other public agency projects. She said, "WSDOT's way easier. [For one thing], [the agency] emails notices [to the company]. I can get right on [the WSDOT] website and take a look. WSDOT also does mailings. The emails may come from [the DBE office]. I'm not positive, but it's the same notice that WSDOT mails out." She also said she looks for projects on Builder's Exchange and signs up for bid notification on public works rosters. She indicated that learning about work is not a problem for her company. [#19]
- The white male owner of a construction materials supply company stated that his company has worked on WSDOT projects for many years. He uses the WSDOT weekly bulletin to find out if there are projects that involve use of [his firm's product]. For projects that will use [his firm's product], he will do a work up of materials and costs and send that by fax to companies on the planholders' list. He said his company has frequently provided [his firm's product] to contractors. [#2]
- When asked about learning of public jobs, the Hispanic American co-owner of a construction company said, "Public jobs we hear about much sooner [than private jobs]. We know that there's always a notice that comes out, 'this project's going to be bid in four months,' [or something similar]. The private jobs happen a lot quicker than that, with not as much notice." [#26]
- According to the representatives of a large publicly-owned concrete company, "It's easier to find out about WSDOT jobs [than other public agency work]. Some agencies advertise in [its] local paper only. City of Seattle and transit [agencies] advertises only on [their] own websites." [#15]
- A white female manager for an MBE/DBE/SBA certified engineering company has not found finding out about potential work to be a problem. She said, "[For identifying prime contractors, our company] is pretty connected in the market and knows what projects are coming out in the future. We know the 'big boys' and if [one] will bring [our firm] on [its] team, [our company] will go after the job." [#9]

- Representatives of a large publicly-owned concrete company explained, "For projects in [this] division, [the company] pursues them through Builder's Exchange, and the Daily Journal of Commerce." [#15]
- The general manager of a woman-owned, DBE-certified specialty contracting company said that besides plan centers and the WSDOT website, the company also markets to prime contractors through personal contact. [#18]
- The white male owner of an SBA-certified specialty construction company said that his company is on various small works rosters, including the roster for a nearby city and the local county. He said notices of jobs with local agencies are always in the newspaper and that is how he finds out about them. He added, "With public stuff, I watch the newspapers [and] my wife watches the computer, mostly the FedBizOpps site. With the private [sector] stuff, a contractor just generally gives [my company] a phone call."

 He went on to say, "I don't know how the State does it, but [with] the federal government, [my company] is [on] ... three ... bidders' lists. ... There are eleven contractors that are prequalified on the list. So, when there's an area that needs to [have certain work done], [my company] bids on it against the others on the list. ... This gets bid over again every four years." [#21]
- The female manager of a Native American-owned, DBE-certified construction company explained, "[The company] seeks work by using websites and plan centers that advertise the bids. [The company] presents [its] proposals on to primes that are bidding the jobs. ... [Our company] identifies the bidders from the planholders' lists at the plan centers. There are three or four on-line plan centers [it] goes to, and [there is] a local plan center And then the job starts off calling every one of those planholders to ask [each one] if [it] will be bidding as a prime [contractor]. That way, [our company] knows [which prime contractors] to send [its] proposals to." [#32]
- A minority female co-owner of a non-certified construction company said that her company sees WSDOT projects on the Internet. [#28]
- When asked if learning about the available work is a barrier, the white male general manager of a general contracting company said, "No, I don't think so. ... [The company finds out about upcoming projects] by public bid notices, because [it] does mostly public work. ... Generally, the prime contractors that call [this company], know [it] because of [its] reputation. [It] has working relationships with [those contractors] from work done in the past." [#33]
- The African American owner of a DBE-certified trucking and specialty contracting company said, "[My company markets to prime contractors] by being on the Internet constantly, going to the state websites, Blue Book, and some ebid systems. ... It is not a barrier." [#36]
- The female owner of a DBE-certified specialty construction firm said, "[To find new projects], I look through the Daily Journal of Commerce (DJC). As a DBE firm, [the company] is allowed to use the subscription at no cost and that is phenomenal. [It] does that through the support services of WSDOT. Also, anyone can access the BXWA (Builders Exchange of Washington) for a listing of projects. Through those two [resources], I identify projects that have been advertised. ... I contact [each] planholder to find out if [it] is going to bid and if [it] is, [I find out if it] is union or non-union. If [its] non-union, I ask if [it] is looking for ... estimates. If [it] is, I put [it] on the list and send [it] our best estimate. But, the response

- usually isn't that good. I get calls from previous customers, and I contact previous customers to see if [that company] is going to bid." [#27]
- The African American owner of a DBE-certified specialty contracting company reported, "I use the Daily Journal of Commerce, and [my company] bids every job that is in it [that might be appropriate to the services it offers]. [Its] success rate is probably around 1 percent." He said that sometimes a prime would e-mail or fax him a job description. He also gets e-mail notifications of jobs from WSDOT, King County, and Sound Transit. [#35]

Some small business owners said that it was more difficult for smaller firms to market and identify contract opportunities. For example:

- The Asian-Pacific American owner of a DBE-certified engineering firm said, "One barrier is not having sufficient staff to find the work. We're competing with firms that have one, maybe two full-time marketers who are devoted to looking for work. Firms with such marketers are able to submit on more jobs. I sometimes find out about projects too late to respond to and the more projects I propose on, the more work the firm is likely to have."

 [#3]
- The white male owner of a small construction company had similar comments. He, said, "[Learning about the available work is not a barrier] beyond the available time. [I act as the] sole proprietor, quality control [manager, and] estimator, [and] I am in this position right now to take this [company to the] next level of growth, I need to replace myself. Finding that person has been the hardest problem I have faced; to find a qualified manager that can transcend construction and energy efficiency, work independently and make decisions." [#22]
- When asked if learning about work is a barrier, the female Asian American principal of an Asian American-owned, MBE/DBE-certified engineering company said, "It's extremely hard for a firm just starting out. It's all about relationships and relevant experience. I don't know how you would do it right now." She continued, "For small firms, you're so busy trying to get your work done that it's hard to spend time marketing. [My firm] doesn't spend much time doing marketing; [it] doesn't have time to do that. [The firm] has a marketing assistant but mostly she puts materials together to respond to requests, not marketing to new clients." [#1]
- She went on to say that her firm is on city rosters and they get invited to bid against just a few other small firms or just directly awarded some jobs through that program. She added, "[My firm] gets work [as a subconsultant] through the relationships [of its personnel with other firms] and sometimes cold calling. [The firm] also [commits personnel to] attend preproposal meetings." [#1]
- She went on to say, "WSDOT announces its projects in [the] Daily Journal of Commerce.

 Once they are announced then everyone knows about [the project]." She said that WSDOT's announcements are in contrast to Idaho's DBE office that used to send out a weekly notice about upcoming projects, and she finds WSDOT's process very helpful. [#1]
- The African American owner of a non-certified consulting firm said, "This is a big challenge. One strategy in [my firm's] plan is to reach out to find people who can help in that area.

Small companies need to know who, within the public agencies, to go to and find out about work." [#4]

The African American owner of an MBE/DBE-certified engineering company said, "[My firm's] marketing is typically relationship based. [It] tries to anticipate what's coming down the line, looking at [agency capital improvement programs], discussions with people in the agencies, and spending time with [its] larger clients. We work at trying to get [the firm] on teams that are going after some projects."

He went on to say, "[To get jobs as a subcontractor my firm] tries to identify projects early, and identify who, within that large [prime contractor] organization, is managing the chase for that project, and [my firm] tries to send out [its] SOQ to that organization to show what [it] can provide for the type of roles that are coming out of that project. [My firm] tries to sit down and strategize with the [prime contractor], what [people at my firm] think, from [personal] knowledge of the client, what would be important on the proposals and things like that."

He added, "[My firm] has a small marketing department. It's hard for [it] to go out and reach further and further and make those relationships. Those are some of the distinct challenges for a small firm. ... Yes, [learning about the available work] is always a barrier. Information is currency. [My firm] is constantly trying to find out what's out there. [The firm] has one employee that I almost never see, because he's out trying to make the relationships and 'look through the bushes'. It's constantly a barrier for small firms." [#8]

- The female majority owner of a non-certified specialty construction company reported that learning about the available work can be a barrier. "I'd like somebody to just call me and say 'this bid's for you.' [Finding] federal [work] is really hard. [I get calls from companies that offer to help get my company into a new work category] and then they want \$5,000, and that should be illegal. It seems like it is a government agency calling [but it is actually a private business that wants to charge thousands of dollars]. If [the company] had a person to really get online and search for bids, then they are out there and available. Especially like the BXWA, that's a wonderful service. It'd be nice if I could put in [my company's] categories and then get notified automatically." [#30]
- The Hispanic American male owner of a non-certified construction company stated that he does see Invitations for Bids on the Internet and thinks that he could be competitive. "I could do that work", he says. He indicated that limited English language skills and business sophistication have deterred him from bidding. [#29]

Bonding requirements and obtaining bonds. Public agencies in Washington typically require firms working as prime contractors to provide bid, payment, and performance bonds on public construction contracts.

Several interviewees reported little or no problem obtaining bonds, or that bonding was not an issue. Examples of those comments include the following:

■ The female manager of a woman-owned, DBE-certified construction firm indicated that bonding was not normally a barrier for her company. "There was only one job that required a higher bond amount than [the company] could [normally] get, and I decided not to bid on that one because it was design-build." [#19]

- A female manager of a majority-owned construction materials manufacturer said, "We have to be bonded, but bonding is not a barrier for us." [#23]
- When asked about bonding, the white male owner of a construction company said, "I haven't had that roadblock, but I know that it exists for larger projects." [#22]
- In contrast to other interviewees, the white female co-owner of a non-certified construction company said, "Bonding is not a barrier for [our company]. [The company] has more capacity than [it] needs." [#31]
- The white male representative of a woman-owned, non-certified construction company said, "[My company] is bonded, [with its] contractor's bond. [Did the company have trouble getting it?] No. [Was it a little expensive?] Yes." [#34]
- The white male owner of an SBA-certified specialty construction company said, "My [company] has never had any problems [with bonds]." He noted the largest bond his company has had to provide was for about \$140,000. [#21]
- When asked if bonding requirements are a barrier, the white female owner and president of a DBE-certified traffic control and specialty contracting company said, "It's not a barrier."
 [#12]
- The Native American co-owner of a construction company reported "No, [the company] has never had a problem getting bonds." [#16]
- The general manager of a woman-owned, DBE-certified specialty contracting company said, while he has heard of bonding problems more in the last 18 months, his company "hasn't experienced it." [#18]
- The white male owner of a specialty contracting company said, "Bonding is not an issue [for my company]." [#20]
- The African American owner of a DBE-certified specialty contracting company reported that bonding was "not an issue." [#35]

Some subcontractors said that prime contractors do not require them to provide bonding. For example, the co-owner of a concrete company that usually works as a subcontractor said that his company is rarely required to supply a bond. [There are] probably three general contractors that ask [my company] to bond work." He said that the rest of them trust his company's reputation and do not require bonds. When he does need to get bonds, he said that he does not have any problem obtaining them. [#17]

Engineering-related companies reported that they are not affected by bonding requirements. For example, the female Asian American principal of an Asian American-owned, MBE/DBE-certified engineering company said that her firm has no bonding requirements, so it is not a barrier. [#1]

Some business owners and managers indicated that bonding requirements had adversely affected their growth and opportunities to bid on public contracts. For example:

 A participant at a trade association meeting shared feedback from the local construction contracting community. "The other thing that was mentioned is, often times, excessive

- bonding requirements that [small businesses] are being asked [to meet] ... their scope of work may be \$500,000, but they are asked to provide a \$1 million bond again. It just goes back to financial issues that exist." [DBEP#1]
- A participant at a trade association meeting representing an educational institution that hires contractors for state-funded (and sometimes federally-funded) projects stated that when they asked the prime contractors about utilizing certified firms their response is that certified firms cannot meet bonding requirements, "and they have small contractors that are electing not to bid on some of the projects at all" As the participant stated, this "is coming from the prime side and saying that ... from the small contractors' point of view it is too risky to do some of these projects. They don't want to put their homes or other assets on the line." [DBEP#2]
- The female owner of a DBE-certified construction company said that her firm has been unable to obtain bonding, "because ... it's a chicken and egg thing. If you don't have a line of credit, it's really hard to get bonding." [#40]
- When asked if bonding is a barrier, the Hispanic American co-owner of a construction company said, "Until [the company] went over the \$10 million dollar revenue mark, its bonding limit was pretty low. Bonding was difficult. [The company] needed a track record to be able to bond \$8 million dollars and even larger. [The company] needed to show [it] was profitable, for one; that [it] had a good track record, didn't have any claims. That took quite a while. [That took] probably five years." [#26]
- The female co-owner of a non-certified construction company said, "Bonding is definitely a barrier. I don't like the way it's based on credit. I think bonding [capacity] should be based on past performance. The current method stinks." However, she also stated that once they received a higher bonding capacity they were hired for larger public works projects in several states. [#24]
- A minority female co-owner of a non-certified construction company reported, "It's harder for small companies to get bonds. It costs money to get a large bond if the return on investment isn't there." [#28]
- The Hispanic American owner of a non-certified construction company indicated that his poor credit makes bonding challenging. "I have to [provide] a surety bond for the city." He said, "I [had to provide the bonding company with cash collateral], so they can hold the money until the job is done." He does agree that bonding requirements are a barrier. [#29]
- The African American owner of a non-certified consulting firm said, "[Bonding requirements] are problematic ... on public contracts. [My firm] had to give up pursuing some public projects where the required bond values were high [and my firm could not obtain the bond]." [#4]
- The white male owner of an SBA-certified specialty construction company reported, "[Yes], getting bonding is tough. If [the company] can't qualify to do even the smallest jobs, then [it] can never get [its] bonding raised because it is based on experience. With [my company] only having had a couple of bonded jobs, [it] can't get [its] bonding level raised. ... [My company] can get bonding at about a \$400,000 level, but the jobs [it] would qualify for are few and far between. ... WSDOT goes back only a few years in viewing experience. For [my

- company], since [it] hasn't done many public jobs, it's hard to get credit for previous experience." [#25]
- The female owner of a DBE-certified specialty construction firm had several comments regarding bonding requirements and obtaining bonds. The first involved an experience as a subcontractor, "It's been really great on the subcontracts [the company has] had on WSDOT projects that [it] has not been required to become bonded. [The company] had one contractor on a public project, not a WSDOT project, that required [it] to be bonded and I had missed that in the contract. [On that project], the prime [contractor] held back out of our retainage, the cost that the prime [contractor] claimed it cost to bond my company. I had to roll with the prime [contractor's] claim because [my company] had to [be paid] ... the retainage. and I didn't have the time to deal with it."

Another incident she related involved being a prime, "When [my company] is a prime and has to bond on a public contract, that is very expensive. With the current economy and my company's financials, [the company's] current bonding company was unwilling to renew the bond. Bond rates are higher when the economy gets worse."

The third experience she described involved bonding for city contracts, "Although some cities have tried a very commendable approach to reduce the bonding requirements for small businesses to 25 percent, the bonding companies do not go for that. A city might call for a bond of 25 percent of the contract amount but the bonding company, based on rules created in the early 1900s, will not issue any bond less than 100 percent of the contract amount. That decision by the bonding company makes the bond expensive." [#27]

- The female majority owner of a non-certified specialty construction company, "Our bonding has been very tough, because it's all based on financials. Bonding can be difficult." [#30]
- The African American owner of a DBE-certified trucking and specialty contracting company said, "It's been a major problem, because it's based on a company's finances, [which are often poor for small DBEs because of the inconsistency of the work]." [#36]
- The white male owner of a new construction company stated, "[Bonding is] a real challenge. One thing I've seen that is totally out of line if [my company] was the successful bidder on a project, and did it exactly to government specs, and the work got signed off and [my company] had been paid, not only does [my company] have to have the bond in place during the job, but some [agencies] require the bond to be in effect for a year after the job is done. That affects my [company's] ability to get a bond on the next job. That's total insanity." [#13]
- When asked if bonding requirements are a barrier, the white male general manager of a general contracting company said, "Yes. Again, it's all market driven; right now it's difficult because of the market." [#33]

Some business owners reported that bonding requirements at WSDOT preclude their firms from bidding on WSDOT contracts. For example:

■ The female co-owner of a non-certified construction company said, "My company would like to see WSDOT loosen up prequalification requirements so that it can bid on WSDOT work. The bonding [requirements] stop [my company] from qualifying." [#24]

The Asian American owner of a DBE-certified construction company wrote, "There are very few, if any, DBE firms that have been able to bid as a prime contractor on any State of Washington Transportation projects in recent years." He indicated that his firm "can only participate as a prime contractor when sufficient bonding capacity has been attained, which can only occur by staying in business, participating in projects, and being profitable on those projects. He said to be a successful prime contractor, "I need access to financing and someone to believe that real minority participation is valuable to the community and society as a whole." [WT#2]

Potential for discrimination against MBE/WBEs. Minority and female business owners, in general, said that they did not perceive overt racial or gender discrimination in obtaining bonding. However, size and capitalization of firms appears to have an effect on the ability to obtain bonding. The African American owner of a DBE-certified trucking and specialty contracting company said, "If the company doesn't have work and can't keep money in the bank, [it] loses [its] credit rating, [and then can't get the financing or bonding that it needs]." [#36]

In addition, one interviewee attributed some of his difficulty obtaining bonding to discrimination. The Native American owner of a DBE-certified construction company wrote that he believes that racial discrimination has affected his firm's ability to obtain bid, payment, and performance bonds." He also wrote, "I have certainly struggled with those issues in the past, and while I have no direct ability to prove it was tied to my status as a minority, I firmly believe that as [a] minority, I have had to work harder to prove I am capable of performing the work in order to obtain ... bonding" [WT#5]

Insurance requirements and obtaining insurance. The study team asked business owners and managers whether insurance requirements and obtaining insurance presented barriers to business success.

Many interviewees reported no instances in which insurance requirements and obtaining insurance were barriers. [for example, #23, #29, #31, #11, #12, #13, #16, #25, #27, #33, #35] Examples of those comments include the following:

- The female co-owner of a non-certified construction company said, "No, [insurance isn't really a barrier]. The requirements are higher than in the past and there's been an increase in rates, but it's a normal business expense." [#24]
- The white male owner of an SBA-certified specialty construction company said, "My [company] has never had any problem with insurance." [#21]

One interviewee identified serious problems for subcontractors in obtaining insurance for public projects. The president of an engineering industry trade association indicated that there are a lot of "pass through issues" that affect small businesses when dealing with insurance requirements. He said that the problem lies in the fact that, in most circumstances, subconsultants cannot piggyback on the prime consultant's insurance policy, which in turn makes it difficult for subconsultants to afford required insurance. In addition, he said that "Some agencies are asking for insurance on things that are uninsurable ...," which makes the problems worse. [#38]

Many interviewees said that they could obtain insurance, but that the cost of obtaining it, especially for small businesses, was a barrier. [for example, interviewees #17, #20, #22, and #34] For example:

- The female owner of a DBE-certified construction company said that her firm has to pay more for insurance requirements because it is a relatively new business, but she accepts that additional cost as part of the industry: "I would say that [insurance requirements] are equal [between large businesses and small businesses] as far as what the requirements are. I just pay more for it because I'm a newer business, but that's just business. Eventually that will get better." She did say that the standard limits that public agencies set can be particularly difficult for small businesses to meet. [#40]
- A white female manager for an MBE/DBE/SBA certified engineering company said, "[Insurance issues] are twofold. [Insurance is] one of the biggest expenses [the company has], but [it] needs to have insurance to protect [it]. It's a challenge to be sure [the company] has enough insurance to cover itself but be able to afford it at the same time. ... [The company] hasn't had a problem getting insurance at the usual \$1 million level. However, some agencies seem to be going toward higher levels of insurance. I've heard that WSDOT is considering requiring \$5 million and the difference in premiums could be two to three times from \$1 million to \$5 million in coverage. That increase would be very significant to a small company like [this one]." [#9]
- The African American owner of a DBE-certified trucking and specialty contracting company said, "It's a barrier because of the price." [#36]
- When asked if insurance requirements are a barrier, the African American owner of a non-certified consulting firm said, "Yes, it is. When the governor came to speak to the Chamber of Commerce about two years ago, I told her that bonding and insurance has become an issue for small businesses, but I don't know if anything was ever done. In the private sector, sometimes insurance can be an issue but not like the public sector." [#4]
- The white male owner of a specialty contracting company stated, "Not an issue for [my company], except it's very expensive. A full 15 percent of my gross goes to insurance." [#20]
- The female majority owner of a non-certified specialty construction company, said, "[The company's premiums] are getting big! It pays \$25,000 a year right now for basic insurance. A big chunk of that is trying to stay up with the limit, with most places now requiring \$5 million of insurance. Insurance is tough, very tough. [The type of insurance the company requires] is really high. There aren't many insurance companies that offer [that type of] insurance." [#30]

Some interviewees indicated that the cost of obtaining insurance was so high as to affect the contracts that they pursued. For example:

■ The female Asian American principal of an Asian American-owned, MBE/DBE-certified engineering company said, "[My firm] has \$1 million in professional liability insurance that costs about \$40,000 [annually]. Lately, some agencies have increased [the] liability insurance requirement to \$2 million and that has significant impact on costs to do business. For [my firm] to get a million dollar increase in coverage might cost another \$15,000 [annually]. It's definitely a barrier because the insurance is not cheap." She added, "When

they ask for high [insurance] requirements, sometimes [my firm] can't even go after a project."

She also discussed differences in insurance requirements between agencies, "WSDOT has been more reasonable. King County had ridiculous insurance requirements of \$3 million for on-call small projects but, when approached [about the insurance requirements], [the County has] reduced requirements somewhat." However, she said, "In 2011 - 2012, it seemed that [all the owners and prime contractors] had increased their limits, so [our firm] will probably just go to \$2 million [as our standard amount]. These days, it's a battle to go through every contract and negotiate insurance limits." [#1]

A few business owners noted that insurance requirements affected opportunities on subcontracts as well as prime contracts. For example:

- The female manager of a woman-owned, DBE-certified construction firm reported, "Insurance requirements are getting ridiculous. Depending on who the prime contractor is, [it is] asking for insurance that [our company] can't even get. For instance, [our company] was just on a project. The contract was for \$12,000, and the insurance [that was required] would have cost \$8,000. It's crazy." [#19]
- The female manager of a Native American-owned, DBE-certified construction company reported, "[The company has] had to change [its] insurance carrier because of requirements of a prime contractor [it has] done a lot of work with. [It] has had to get more insurance coverage doing WSDOT work. [WSDOT] pretty much wants [all contractors] to have the same limits of liability. It's like 'double dip' but the prime [contractor] is making sure that there is no risk at all for [it]." [#32]
- Although they did not report problems with insurance requirements for their company, representatives of a large publicly-owned concrete company said, "There are a lot of subcontractors that can't meet certain insurance requirements even by the agencies that [our company] works for." [#15]
- The African American owner of an MBE/DBE-certified engineering company said, "Not for my business, because [it] is not on the contractor side." [#8]
- The general manager of a woman-owned, DBE-certified specialty contracting company stated that the company had not had any problems obtaining insurance. The interviewee did say that insurance requirements are becoming more stringent. "Insurance requirements are increasing drastically. Everyone wants you to indemnify the hold harmless. That's going to be a difficult thing in the future." [#18]

Prevailing wage requirements. Contractors discussed prevailing wage requirements that government agencies place on certain public contracts.

Many business owners and managers said that prevailing wage requirements present a barrier to working on public contracts. For example:

The white male owner of a survey company said, "[My firm] would stay away from it. [My firm] has done a couple of prevailing wage jobs, and both times I said [my firm] would never do another one, because of the paperwork, not the wages." [#5]

■ The white female CEO and co-owner of a WBE-certified construction company said, "[My company] has chosen not to be union. I don't think the unions like [my company] too well. There are other contractors that have had problems, but [our company] tries not to get in the way [of the union]." [#11]

A few companies said that they had seen backlash from unions because they were not union shops. For example:

- As described by the general manager of a woman-owned, DBE-certified specialty contracting company, "[The company] has an extreme problem with the union. [It] is not a union company. The union recruits union companies to protest [the owner's] DBE designation. [The company] has been to show-cause hearings on three different occasions. It is always the exact same allegation, [just a different jurisdiction]. [The company attorneys have prevailed at each hearing]." [#18]
- The white male owner of an SBA-certified specialty construction company related, "[Yeah. My company] has worked on job sites that have unions. The [unions] don't like me there. I'm like a flea or fly to them, a fly in the ointment." [#25]

Some DBE-certified firms said that project labor agreements on certain jobs presented a disadvantage for DBEs and other small businesses that are not union employers. For example:

- When asked if working with unions is a barrier, the African American owner of a DBE-certified trucking and specialty contracting company said, "This is a very big barrier. There is billions of dollars of state work going on that require DBE participation, and some of these jobs require a project labor agreement. It requires small businesses to sign a contract [with a union] that is not required on a federally-funded job. When the union is involved, the dues just destroy the small businesses." [#36]
- The white female CEO and co-owner of a WBE-certified construction company said, "[Public jobs are often union jobs, and our company] is not union, and we [normally] don't work for a union contractor, because we can't, unless we pay the prevailing wages and benefits [on that job]. ... There are some projects that have labor agreements that [our company] can't work on. Sometimes there are PLAs [project labor agreements] in effect, and that's sad, because it costs [the owner] more money if there is a PLA in place." [#11]
- The female owner of a WBE/DBE specialty construction firm wrote, "We really have to do something about the PLA situation. It is clearly discriminatory. ... It should be free choice and it is not. Washington State Wage Rates are already established and both union and open shops are responsible to pay the same amount. "[WT#4]
- When asked if being a union or non-union employer was a barrier to success, the general manager of a woman-owned, DBE-certified specialty contracting company stated, "[The company] tried [working with the union] years ago. It was a horrible experience. [The company] has been low bid and DBE, but the union companies have been instructed not to use [it] on these public works projects, because [it] won't sign a [union] agreement."

 The interviewee described just one disadvantage he sees to becoming a union employer, "[The company's specialty] crew is probably the best one in the State of Washington [If the company] signs a union agreement, [it] can't take that crew with [it to the worksite]." He

went on to explain, "[The company] has never been denied the opportunity to bid, but [it] has been denied the work, even after being the low bidder. The reason is that [the company] wouldn't sign a union labor agreement and this was on public sector jobs. Contracts are written in such a way that prime contractors are required to use union subcontractors. [Prime contractors can get around it but it's not worth the harassment by the unions]. It has happened on both sides of the mountains." [#18]

- The African American owner of a DBE-certified specialty contracting company said, "[My company] is non-union. If [it] has a job that requires union [affiliation], [it] signs up with that union for that one job, and it hurts to send that money in. It's kind of like the mafia making a restaurant pay for protection." [#35]
- When asked if working with unions can be a barrier, the a Subcontinent Asian American male owner of a certified engineering firm said he has heard of a lot of engineering companies that have had to pay higher rates for surveyors on [construction-related work]. He said, "The unions have been pushing hard for WSDOT to go through and make the prevailing wage for surveyors match what unions are paying [for that type of work]. The rates for some field surveyors have tripled or quadrupled from what they used to [be]." He said that although this situation has not affected his business, it is a concern in the survey industry. [#10]

A few interviewees explained other barriers concerning union requirements, and other negative experiences. Examples of those comments include the following:

- Representatives of a large publicly-owned concrete company, a union shop, said, "One of the obstacles [for our company] is the apprentice requirements [it] has on some projects. That is also a problem with the subcontractors, not being able to supply apprentice hours on a project. And not only can they not supply the hours, but they don't know how to do 'good faith efforts'. So, that's an issue dealing with subcontractors. In our [company's] solicitations to subcontractors [it] specifically says that you have to meet apprenticeship goals of the contract. That could be 'good faith efforts'." [#15]
- The African American owner of a DBE-certified trucking and specialty contracting company said that he signed up with the union in his previous company because of assurances from the union officials that there was constant union-affiliated trucking work. It worked well for the first month, but then things slowed down. He went to the union officials, who told him that the union couldn't interfere. He said, "I ended up shutting that company down because of that." [#36]

Some business owners and managers said that being a non-union company had not been a barrier to obtaining public sector projects. For example:

■ The white male owner of an SBA-certified specialty construction company said that his company is not a union company but on all local public works and federal jobs, [it] pays prevailing wages, which has not been a barrier. [#21]

Prequalification requirements. Public agencies, including WSDOT, sometimes require construction contractors to prequalify in order to bid or propose on government contracts.

Some business owners and managers said that prequalification requirements presented a barrier to bidding on work. A number of interviewees mentioned WSDOT prequalification requirements in their comments. For example:

- The white male owner of an SBA-certified specialty construction company said, "With WSDOT prequalification, [my company] can only bid on small works roster contracts up to \$200,000. [It] can bonded higher than that. [The prequalification process] was handled by my wife. I think it was not an easy process to complete but she handled it. She told me just this morning that if we wanted to get [the company's prequalification] limit raised we'd have to spend up to \$10,000 getting [CPA reviewed financials]. If your company hasn't been doing that much business, that won't do any good anyway."

 He continued, "[My company] went through a prequalification process with WSDOT and WSDOT set dollar amounts that I can bid up to by categories. I get a weekly list that shows the dollar amounts of jobs, but there aren't many jobs that fit the dollar limit WSDOT gave me. ... If I contact WSDOT, they just refer me back to the prequalification list to identify jobs
- The white female co-owner of a non-certified construction company said her company is not prequalified as a general contractor with WSDOT. She explained, "[Our company] should be prequalified, but I received the [prequalification] packet from WSDOT and it just seemed overwhelming at the time." [#31]

for [my company] to bid on but there just hasn't been any." [#25]

- The female co-owner of a non-certified construction company said sometimes prequalification requirements are an issue, like the way WSDOT wanted the company to submit financials. She believes past performance should carry a lot of weight. [#24]
- The white male owner of a new construction company said, "Yes, this would be a barrier as a new company." [#13]
- The co-owner of a concrete construction firm said, "Yes, in specific kinds of work there are prequalification [criteria] that are difficult to meet, but they [are] difficult for all my competition also." [#17]

A few interviewees contrasted prequalification requirements in the public sector with typical practices in the private sector. For example:

- One of the reasons public sector work is more difficult to obtain than private sector contracts is prequalification, according to the white male owner of a construction firm. He said that his firm has to meet prequalification criteria before it can even have that opportunity to bid a public sector contract. "In the private sector, it's up to the owners, really, to check [with] L&I, [the] Better Business Bureau, [or] any government agency or [the] Internet to provide [the owner] proof that [the contractor] is licensed, bonded and insured, and current." [#22]
- The Hispanic American owner of a DBE-certified engineering firm said that only public sector agencies prequalify companies. Prequalification is not a barrier in private sector work. [#7]

Some interviewees indicated that prequalification was not a barrier to pursuing public sector work. [for example, #23, #29, #34, #4, #9, #12, #18, #21, #33, #35, #36] Examples of those comments include the following:

- The female manager of a woman-owned, DBE-certified construction company said her company is prequalified with WSDOT and that meeting the prequalification requirements is not a problem. [#19]
- When asked if the company was prequalified with WSDOT, the representatives of a large publicly-owned concrete company said, "Yes, [and that process of getting prequalified] is not a difficult process. It's a long form but the information is pretty much the same [as other prequalification forms the company does]." [#15]
- The white female owner of a DBE-certified specialty contracting company said that her company has been prequalified as a general contractor by WSDOT. "That process was pretty easy." [#12]
- The female owner of a DBE-certified specialty construction firm "[The company] has been teaming up with a prime contractor on a WSDOT project and where before there wasn't a prequalification requirement for traffic control, now there is. I think this is a good thing. That's the first time I've seen it." [#27]

Some owners or managers of engineering companies said that prequalification was not typically required for their firms. For example:

■ The African American owner of an MBE/DBE-certified engineering company replied, "[No], typically [an engineering firm] has to be licensed, and have a business license, [but my firm hasn't been required to be prequalified otherwise]." [#8]

Licenses and permits. Certain licenses, permits and certifications are required for both public and private sector projects. The study team discussed whether licenses, permits, and certifications presented barriers to doing business for firms in the transportation contracting industry.

Many business owners and managers reported that obtaining licenses and permits was not a barrier to doing business. [for example, #22, #23, #29, #31, #4, #12, #15, #18, #20, #21, #27, #33, #35, #36] Examples of those comments include the following:

- When asked if obtaining licenses or permits is a barrier, a female representative of a majority-owned specialty contracting business reported that each flagger must be certified. She explained, "We have a certified instructor that comes out, gives the training, and hands out the certification cards." She didn't consider the certification process to be a barrier. [#14]
- The female manager of a woman-owned, DBE-certified subcontractor agreed that getting licenses and permits for her company's work is not a barrier. [#19]
- The Hispanic American owner of a non-certified construction company said, "I went to the [Washington State Department of Licensing] to talk it over about the license, the cost of the license, so everything was pretty cheap. Everything was really, really cheap." [#29]

- The white male owner of a survey company said, "Sometimes one of the little towns will say 'Your [company] has to buy a business license.' It's not a barrier." [#5]
- The white male owner of a new construction company has one license that was not a problem to acquire. [#13]
- The Native American co-owner of a construction company reported, "When [the company] does installations [it] has to follow codes and pull permits. It's not a barrier, though." [#16]

Some interviewees indicated that sometimes subcontractors can rely on prime contractors to obtain necessary permits. For example:

- Licenses and permits were not reported as a barrier by the co-owner of a concrete construction firm that primarily works as a subcontractor. He said that the work is permitted by the owner or general contractor, and that his company does not have to deal with those issues. [#17]
- The white male representative of a woman-owned, non-certified construction company said that getting licenses and permits for his company's work is not a barrier. He explained, "[My company] does not have to pull permits, that is the prime contractor's responsibility. That's one reason why [my company is] a subcontractor instead of a prime contractor." [#34]

Some business owners said that obtaining permits can be a barrier. For example:

- The female Asian American principal in an Asian American-owned, MBE/DBE-certified engineering company said, "Being a minority doesn't contribute to any issues about licenses and permits. Getting a permit from local agencies is very onerous for small projects and that is for everyone, not just small businesses." [#1]
- The female majority owner of a non-certified specialty construction company reported that licensing was not a barrier for her firm, however, permits for highly specialized work can be difficult to obtain. [#30]

Other unnecessarily restrictive contract specifications. The study team asked business owners and managers if contract specifications, particularly on public sector contracts, restrict opportunities to obtaining work.

Many owners and managers indicated that some specifications are overly restrictive and present barriers. [for example, #11, #34, #13 and #36] It appears that some businesses choose not to bid or are precluded from bidding due to what business owners and managers perceive to be overly-restrictive contract requirements. Examples of those comments include the following:

■ The female owner of a DBE-certified construction company said that there can be unnecessarily restrictive contract specifications on WSDOT contracts around joint check agreements, which can become an issue when determining whether DBE subcontractors are actually serving commercially useful functions. She explained, "[WSDOT] came out with a spec ... that says, to preserve commercially useful functions, the general contractor will issue a joint check payment to the supplier and the sub. The sub takes it to the supplier ... and [the supplier] is supposed to sign off on it, and then I take it to my bank, and then I

- write [the supplier] a check out of my own funds. ... The problem is that in this construction environment ... [suppliers] have seen so many subs and generals fail, that they're leery of entering into a joint check agreement that doesn't have the protections that they think they have if they get the checks directly from the generals." [#40]
- The Hispanic American co-owner of a construction company said that restrictive contract specifications are a barrier. "There was a bid that [the company] put out and the owner specified that they needed the erector to be [a certain institute] certified. There aren't any in this state. Well, there was just one [company]. So they gave it to [that company]." He complained that this happened several times. He continued, "[Another issue can be] safety. They want to see if your experience modification rating is higher than one ... [if it is], you're told that you can't bid." He also said that he's also seen restrictions based on financial strength of the bidding company and that bonding requirements can be unreasonable. [#26]
- When asked how public sector work differs from private sector work, a white male owner of a construction company said, "[In the public sector], the safety requirements are beyond what they are in the private sector. [The company] needs additional personnel, and certifications for equipment, ladders, safety devices, hard hats, and first aid. It really takes it up a notch. The cost of doing business goes up, also." He did add that on one private sector contract, an insurance requirement made the project cost prohibitive. [#22]
- The white female co-owner of a non-certified construction company said contract specifications can be a problem. She explained, "Apprenticeship requirements are a problem. Some [companies] aren't bidding jobs because [their company] can't or won't meet the apprenticeship requirements. There's a lot of paperwork. One gal worked for us for two weeks recently and is still getting paid by the state for an injury. It's not been a satisfying process." [#31]
- The African American owner of a non-certified consulting firm said, "[Yes, in the public sector, unnecessarily restrictive contract specifications] can be complex and convoluting and confusing. Small companies, like mine, need to know who to reach out and know, who is the 'go to' person." [#4]
- The general manager of a woman-owned, DBE-certified specialty contracting company said, "That's difficult. [Specifications are] clear, normally. [Our company] literally makes assessments on some jobs because of how confined, rigid, and foolish in some ways it is. [It] won't even take part in it." [#18]
- The female majority owner of a non-certified specialty construction company said that her company generally only gets a couple of pages of specifications her particular part of a job, but she has to agree to and sign the entire contract. She said, "For the little guy going in and just responsible for [a small part of the job], that's hard. So, I sign contracts in fear. [As owner of the company, it feels like] I just sign my life away. So many of these clauses are getting pretty heavy, too. And [the company] doesn't work if [its owner] doesn't sign [the contract]." [#30]
- When asked about unnecessarily restrictive contract specifications being a barrier, the white male general manager of a general contracting company said, "Yes, [that is a barrier], particularly with federal agencies." [#33]

Although also examined separately in Appendix J, indemnification and insurance requirements on public sector contracts were frequently mentioned as contract specifications that restricted access to public work. For example:

- The female Asian American principal of an Asian American-owned, MBE/DBE-certified engineering company said, "Indemnification and insurance specifications [are unnecessarily restrictive and are a barrier to small business]. In addition, it's a common requirement on the big projects to demonstrate that the prime contractor and subconsultant have teamed together before, and that makes it difficult for 'fresh blood' to come in." [#1]
- The African American owner of an MBE/DBE-certified engineering company said, "[My firm] finds itself, at times, in a position where [the agencies] are asking for insurance limits that far exceed what a small business can provide. [My firm] has to negotiate with the prime contractor and ultimately with the agency to reduce that requirement so that [it] can do the work. It's a lot of work, but [the firm] is generally able to get it done." [#8]

Some business owners and managers did not identify restrictive contract specifications as a barrier to doing business. [for example, #29, #16, #35] Examples of those comments included:

- When asked about restrictive contract specifications being a barrier, a female representative of a manufacturer of construction-related products, said, "No, that's not a problem. [In fact], there could be more restrictive contract specifications that appreciate the performance-based value of [my company's] products." [#23]
- The white male owner of an SBA-certified specialty construction company said, "This has not been a problem if everything is read [carefully] and [the contract] is clear on what is required." [#21]
- The female owner of a DBE-certified specialty construction firm said, "I can't think of any restrictions that affect my company. I think most of the restrictive specifications and procedures affect primes more than subs. I think the more restrictions [concerning] quality there are, the better the performance [the agency] will receive." [#27]

Bidding processes. Interviewees shared a number of comments about bidding processes.

Many business owners said that bidding procedures presented a barrier to obtaining work. Examples of those comments include the following:

- The white male owner of a construction company said that the difficult bidding process actually helps his company because it removes other firms as competitors. "I have experience with it. Where it benefits [my company] is that others with less experience will not attempt to climb that mountain." [#22]
- The African American owner of an MBE/DBE-certified engineering company said, "Filling out all the small works rosters is redundant and can be a barrier." [#8]
- When asked if the bidding process can be a barrier, the white female CEO and co-owner of a WBE-certified construction company said, "Yes, sometimes on public [sector projects]" [#11]

- The African American owner of a non-certified consulting firm said, "Yes, [the bidding process] is a barrier because the volume of requirements is a problem for small businesses. Even when [public owners] say 'find a prime contractor to partner with,' we need to know the mechanism to do that." [#4]
- The white male owner of a new construction company found the bidding process to be "burdensome" and with a lot of repetition. He added, "I think they should spend more time on the scope of work" [#13]
- The Asian-Pacific American owner of a certified engineering firm said, "[My firm] has given up on trying to obtain work with King County. [King County has] processes and paperwork [that] are costly and my firm can't get that back in profit, because the profit margins are very low." He went on to say, "[The firm] has to look at the profit margin at King County and at private work where the profit margins are a little higher," in deciding what work to pursue. [#3]
- The white female co-owner of a non-certified construction company said, "There's just a lot of paperwork." [#31]
- The president of an engineering industry trade association indicated that the contracting process in the public sector takes much more time than it should. He asked rhetorically, "Why should it take once your selected a year to negotiate a contract? It wouldn't seem to me to be in anyone's best interests to spend that level of resources on negotiating. A lot of what we do as an organization is to put into place both best practices and laws to make that process go more smoothly for everybody."

He also indicated that public agencies are also becoming more risk averse, which further slows down the contracting process. "Public agencies have been gradually getting more and more risk averse to the point where they've been asking consultants to indemnify them against anything that happens, whether or not it was [due to] the negligence of the contractor That negotiation would add months to the [process]. In many cases, firms would walk away from the contract ... and then you would start the negotiation process all over again." [#38]

Several interviewees reported no problems with the bidding process. [for example, #29, #20, #21, #23, #32, #33, #35] Specific comments included:

- Concerning the bidding process being a barrier, the white male representative of a womanowned, non-certified construction company said, "No, that's just a matter of reading plans and getting it done." [#34]
- The general manager of a woman-owned, DBE-certified specialty contracting company reported no problems with the bidding process, "Almost all the agencies model it after WSDOT and I think that process is good." [#18]
- Concerning the bidding process being a barrier, the female majority owner of a non-certified specialty construction company responded, "[No]. Most jobs are fairly black and white. You have to show your [company's] bonding, etc. [Occasionally] the scope of some [on-call] contracts is too broad. Most bids are quite generic, though." [#30]

Non-price factors public agencies or others use to make contract awards. Public agencies select firms for some construction-related contracts and most professional services contracts based on factors other than price. Many firm owners and managers made observations about those non-price factors.

Many business owners and managers had complaints about factors that public agencies use to make awards. For example:

- The white male owner of a construction company said that he sees certain factors as confusing and that he fears inconsistency in application. He said that there is some lack of transparency in the bidding process. [#22]
- The Asian-Pacific American owner of a DBE-certified mechanical engineering consulting firm said, "[My firm] has gone after indefinite quantity contracts with the State of Washington and King County, but that work always goes to firms that have previously worked there. Even though there are aspirational goals, it always comes down to the project managers selecting the consultant. If [project managers] don't know [your company], they're not going to [choose it]." He continued, "Going through King County, trying to get work has been really tough and not successful." [#3]
- Proximity of a contractor's business to the work location can be a factor, as described by the female co-owner of a non-certified construction company, who said that her company does have issues with location. She said, "Our company bid on a Forest Service project once and was the low bidder. But, the Forest Service gave the job to another contractor, one that was within 5 miles of the dam." [#24]
- The African American owner of an MBE/DBE-certified engineering company said, "That's kind of a hard one. It always seems like the bids you feel most confident about are the ones that [the firm] loses. I think the agencies do a decent job of telling [firms] where to focus, giving [bidders] questions to prepare for interviews, so I think the agencies have been doing a better job of trying to make the judging a little more standardized." [#8]
- When asked if factors that public agencies use to make contract awards can be a barrier, the white male owner of a new construction company said, "Yes [I don't understand why I'm not selected on some of the bids I've submitted]. I think we've been competitive." [#13]

Some business owners said that experience requirements were a barrier to doing business with public agencies. For example:

- The Subcontinent Asian American male owner of a DBE-certified engineering firm said that he finds it difficult to compete in the structural engineering field. He said, "A lot of these proposals are qualification-based selection process. We are a small firm. It's hard to go in and compete with the huge backlog and experience that these other firms can ... show as their skill sets." [#10]
- The Asian-Pacific American owner of a DBE-certified engineering consulting firm said, "My firm has experience dealing with various public agencies. I have been told that a reason [my firm] was not selected [for a project] is that [the firm] lacked familiarity with the client. ... [Because of] a lack of familiarity with some of the project managers, such as at King County,

- [my firm] probably doesn't get selected. If [one] looks at who keeps winning, it's only a few firms and [those firms are] seen all over again." [#3]
- When asked if experience and expertise are barriers to working with public agencies, the African American owner of an MBE/DBE-certified engineering company said, "Yes. [My firm] submits [its] SOQ and tries to be as broad as [it] can with the folks [it] is looking to bring on. Sometimes I feel that [the firm] doesn't have that right person. [The firm] tries to anticipate what [work] is coming up and who [the firm is] ... going to need for that [work]. But if [the firm] hasn't done a good enough job at anticipating, there will be work out there that [it] just doesn't have the [people] ... to fit." [#8]
- The white male general manager of a general contracting company said that experience requirements can be barrier. "[It can be] on some projects that require different kinds of prequalifications, like working at Fairchild Air Force base." [#33]

Some interviewees reported no barriers related to experience and expertise. [for example, #18, #33, #30] One interviewee said that the DBE Program gave her firm the opportunity to demonstrate its qualifications and experience. When asked if experience and expertise are barriers to working with public agencies, the general manager of a woman-owned, DBE-certified specialty contracting company said, "No. That's one of the advantages of the DBE Program. It gave [the company] the opportunity to show that [it] was qualified. Past customers are the biggest promotional group. They will tell others 'If you want it done quickly, fast, efficient, with no problems, call [our company].' " [#18]

Some interviewees said that the application of non-price factors worked in their favor. For example, a manager of a majority-owned construction materials manufacturer stated that public work is awarded based on the lowest bid, although she stated that the State of Oregon did a bid based on a value-added project. She also said that the State of Colorado uses a value-based process, and her company is more competitive in that type of bidding. Further, she stated that the company has a higher margin in the private sector because the public sector expects volume discounts. [#23]

Timely payment by the customer or prime. Slow payment or non-payment by the customer or prime contractor was often mentioned by interviewees as a barrier to success in both public and private sector work.

Most interviewees said that slow payment by the customer or a prime contractor is an issue and can be damaging to companies in the transportation contracting industry. Interviewees reported that payment issues may have a greater effect on small or poorly-capitalized businesses. [for example, #11, #18, #28, #34] Examples of such comments include the following:

- The president of an engineering industry trade association said, "Timely payment is probably the biggest barrier, both for design work as well as for construction. ... Payment from the main client holds up and trickles down slowly to all the designers and subs. In some cases, financing from the client does not allow for payment until completion. This has forced private companies to, in essence, be the bank and carry A/R for way too long." [#38]
- A participant at an association meeting shared feedback from the local construction contracting community on payment issues. "Excessive slow pay continues to be an issue. It

seems that DBE contractors are put into a position where, as they are told and taught you need to develop relationships with prime contractors in order to be more successful and working with them and be able to ideally work with them on projects that are negotiated — private sector contracts, not just public sector works where the prime is required to use DBE companies — but often times they are put in a position of excessive slow pay situations where they are having a go and trying to maintain a relationship but also being asked to get paid."

The participant continued, "Similarly, tied to that is being asked to perform work without receiving change orders and saying well, 'Here is my hand shake, trust me, and do the work, and you'll get paid on it,' and of course down the road it becomes a long arduous process. [Other discussion participant] mentioned earlier where companies two years later are still trying to get paid on work that they have done to the satisfaction of everyone, but the money is being held by the primes. Tied to that too is the cost of legal fees. Small contractors can't go out and hire attorneys. …" [DBEP#1]

- The female owner of a DBE-certified construction company indicated that, in general, prime contractors are not concerned with paying subcontractors on time and the protection that are in place for subcontractors are ineffective. She said, "[General contractors] will back charge you, they will short pay you, they will delay pay you, and these are on [DBE condition of award contracts. ... There's no teeth to the protections for the DBE subs to actually get paid."
 - She described WSDOT's DBE Certification of Amount Paid form as "a joke." She said that the form is "totally one-sided there's no verification that the DBE concurs that they were paid that. For all I know, these general [contractors] that I have problems with are reporting that they've been paying me what they're supposed to be paying me."
 - She described a situation on a recent contract where the prime contractor was not only paying her late but was also not paying her the correct amounts. She said, "Just by looking at some of the bid items, I saw that they short-paid me 46,000, just in looking at two months." [#40]
- The Hispanic American owner of a DBE-certified engineering firm said that timely payment was not a barrier, but that it takes work to get on-time payments. "It has to be part of your [company's] foundation. [It] has to hire someone who's good at [encouraging timely payments]. I'm not going to do it [myself]. Bring someone on the team or hire a firm to do that." [#7]

One interviewee identified problems with agencies, not prime contractors, paying on time. The African American owner of an MBE/DBE-certified engineering company said, "Typically, working on the municipal side, getting paid by the prime is generally not that big of a deal. There might be a hiccup here and there. Getting paid from the agencies, that can sometimes be more difficult. If [my firm] is a prime, [it] can sometimes expect payment to take 90 days. If [it] brings on a new person for a prime to a new contract, [my firm] is floating that money." [#8]

Some business owners said that they had to stop working with particular clients or prime contractors because of payment issues, and one interviewee explained that the firm owner closed a business because of slow payment. Examples of those comments include the following:

- When asked if timely payment could be a barrier, a female representative of a majority-owned specialty contracting business said, "Yes, getting paid on time is sometimes an issue." She reported that the firm owner had gotten out of one type of construction business, and closed his firm, because of slow payments and other issues related to heavy construction. [#14]
- The white male owner of a survey company said, "The only agency that [my firm] ever had trouble with is [specific Indian Nation]. In fact, [it] stopped working for [the tribe]. [There is] no legal recourse. Cities, unless something gets lost, are probably [paying in] 60 to 90 days, and that's no problem." [#5]

Business owners and managers frequently mentioned excessive retainage and delayed final payments on contracts as concerns. Examples of those comments include the following:

- The female co-owner of a non-certified construction company said, "[Timely progress payments by the customer isn't a barrier], but the final payment sometimes takes a while." [#24]
- The white female co-owner of a non-certified construction company said, "Getting the payment for retainage can be a problem. [The company] got a retainage check in April and it was backdated to January." [#31]
- A female manager of a Native American-owned, DBE-certified construction company said, "Recently, WSDOT decided not to hold retainage any longer from prime contractors but prime contractors don't want subcontractors to know about that. A prime contractor considers retainage held from subcontractors to be the only back up [it] has on subcontractors. Once work by a subcontractor has been accepted, the subcontractor should be paid including any retainage released." [#32]

Interviewees were also concerned about timely payment for change orders on contracts. For example:

A participant in a trade association meeting representing an educational institution that hires contractors for state-funded and federally-funded projects reported, "I did have an example last year of a subcontractor who had lots of issues with change orders and the prime would [cite] the University as doing the change order and the University [would] say 'that doesn't sound right,' and then it went back to the subcontractor and then her portion was even smaller and she felt like she was doing the work for almost free and there was a lot of confusion in terms of ... [where] the change orders came from, was it the University or was it the prime? But her contract was with the prime versus state so there are all of these issues going back and forth and ... she just said it's not worth her time and energy and she will try not to work with that prime again. But it is confusion that takes away the subcontractors side from their business." [DBEP#2]

- The co-owner of a concrete company said, "The biggest problem ... is change orders and making sure that the extra work gets processed, whether it's a state or private agency, so that [the payment is not delayed]." [#17]
- The Hispanic American co-owner of a construction business gave an example of when his company was never paid by the prime contractor for a change order. [#26]
- Representatives of a large publicly-owned concrete company said, "[WSDOT] is easier to get payment from when compared to other agencies, except for anything extra or changes." Further, they explained, "[Our company] doesn't get timely payment because of all the paperwork requirements, which then affects the subcontractors that work for us. A lot of smaller contractors rely on that cash flow to basically continue to operate the business. The agencies will let companies bid the job and not supply training needed to do the paperwork that the agency needs [for timely payment]. It seems that DBE companies should be required to learn how to fill out the required paperwork before being allowed to bid on some of this stuff. So [our company] ends up being the trainer just so [it] can get paid." [#15]

A few business owners and managers said that payment was sometimes more difficult on private sector contracts than public sector work. Examples of such comments include the following:

- A white female manager for an MBE/DBE/SBA certified engineering company said, "On the private side, [the company] deals with slow payment a lot more, especially when the economy is not good. On the public side, where most of the work is, when [our company] is the prime [contractor], things are much better and when [it] is a sub, [it] just needs to get the paperwork in on time to the prime [contractor]. [The company] has not had issues about non-payment." [#9]
- When asked if timely payments are a barrier, the white male general manager of a general contracting company "For the most part, public works do not have a problem with that. There are legal requirements. That's the reason [the company] does public work." [#33]
- The white male owner of an SBA-certified specialty construction company reported, "[Timely payment on the public side] has been very, very good." He said he has had a couple of bad experiences in the private sector but noted that "Every company is going to have [such experiences]." [#21]

However, some other interviewees indicated that slow payment was much more of an issue on public sector contracts. Examples of comments concerning timely payment on public sector work include the following:

The female majority owner of a non-certified specialty construction company reported, "[On] private jobs there is never any problem getting paid. There's never any waiting. It's in the contract. [For public sector jobs], as a prime contractor the payment comes a little bit faster, but in public work [the company] is still going to wait a lot longer. As a subcontractor it can be a little bit of a problem because [some prime contractors] want to hold on to the payment forever. It often has nothing to do with the job [my company] does. It might be some concrete contractor holding things up." [#30]

- The white male owner of an SBA-certified specialty construction company, "[No], I think the payment terms are pretty well spelled out in the contracts. [The agencies] typically follow the procedures they're supposed to. [However], from my company's brief history [with public work], it seemed that there were times [the agencies] found reasons to hold back on payment, some obscure reasons. [My company] has to pay [its] bills when they're due and [it] doesn't have a grace period for paying [its] bills. [Agencies] can always find some reason to delay paying in all the piles of paperwork and regulations." [#25]
- The African American owner of a non-certified consulting firm said, "This is not a problem in [the] private sector. Payment is prompt and in accordance with the contract terms because primes follow the contract." [#4]

A number of interviewees specifically mentioned "dishonesty" or unethical practices of prime contractors when discussing difficulty of being paid as a subcontractor. Some interviewees pointed out how prime contractors could unfairly take advantage of subcontractors:

- The Hispanic American owner of a non-certified construction company indicated that some prime contractors are not honorable or honest, and that often is not evident until the end of the job. He said, "Yes, [getting timely payment] is sometimes an issue." He also stated that quicker payment is a benefit of being the prime. [#29]
- The white male owner of a specialty contracting company said that his company demands timely payment from its customers or it won't work for that customer again. He believes that some prime contractors are not very honest and will complain that payment hasn't been received from the agency when, in fact, it has. [#20]
- A female manager of a Native American-owned, DBE-certified construction company said, "Prime contractors include a provision in the subcontract that the prime [contractor] isn't obligated to pay until it is paid by the owner. The prime contractor can always find something to claim the subcontractor didn't do or [it] says [it] can't find documentation." [#32]
- The African American owner of a DBE-certified trucking and specialty contracting company said, "[A major prime contractor] took [my company] for half a million dollars. [It] knows [my company] is a small business and [it] took advantage of [that]. [My company] worked hard to do that work. [It] did it on time, on spec, got the paperwork signed, and [the prime contractor] deliberately knew that [it] was not going to pay [my company]. A small firm doesn't have access to attorneys, to protect [its] interests, and the [big prime contractors] know that [it] doesn't have that capacity, so when it comes to that, the prime contractors take advantage of [the small firm]. [My company] didn't have the capacity to take legal action." [#36]
- The Asian-Pacific American owner of a DBE-certified engineering firm reported that on a particular government contract, "[my firm's] work has been done but [it has been] over one-hundred and twenty days without payment. What I understand from the agency is that they have paid everything to the prime and [the agency representative said], '[The agency] doesn't deal with subs because [the] contract is with the prime." He lamented, "[My firm] has no power to go to the agency and say [our firm is] not getting paid." He went on to say, "Not getting paid in a timely manner is a problem for all subs, not just women and minority

owned businesses. It's a function of the status of the prime. If [the prime contractor] is having financial issues, [it] doesn't pay [the] subs."

The same interviewee went on to say that interest penalties on primes who do not promptly pay their subs are not effective. [The prime contractors] say, 'If you want your money, you have to waive that interest percentage.' What can [my firm] say at that point? [It] just has to wait." He said that generally, the practice has been occurring in both public and private work. [#3]

One interviewee explained the connection between slow payments and the ability to obtain financing. The female owner of a DBE-certified specialty construction firm, said, "It's so hard to explain to a bank when you're trying to get a loan [for the company] the reasons for [uncollected receivables] during a year. I'm not perfect [in understanding or seeing all requirements in a contract] but I've learned from every one of them. But there are just as many opportunities for a general contractor that wants to make some or more money on the contract to find a reason to squeeze [its] subcontractors. I've talked to subcontractors who have just rolled over when this happens. I've gone to extremes of seeking attorneys and DBE support services [to protect my company in that situation]. In tough economic times, prime contractors know that a subcontractor will pretty much take what [it] can get in order to meet payroll. There are [some prime contractors] that wait until the end of the contract to squeeze subs." [#27]

Some interviewees specifically mentioned slow payment on WSDOT projects to be a problem. They reported that primes had been paid, but then unfairly held payments from subcontractors:

- The white female owner of a DBE-certified specialty contracting company said, "This is sometimes an issue. ... I don't have any idea when WSDOT sends a payment to the prime contractor. And, according to all the subcontractor agreements, [the prime contractor] can hold my [company's] payment for at least 10 days after it is received. I have contractors that hold it for a month and keep telling me that the check hasn't been received yet [from WSDOT]. There is one project that is behind by two months. I contacted WSDOT and was told the [prime contractor] has been paid. There is no recourse [and no control over this issue]." [#12]
- When asked if her company has experienced slow or no pay on WSDOT projects on which it has worked, the female owner of a DBE-certified specialty construction firm said, "Yes, [my company has experienced that]. [In addition], I've never received a call [from an owner or WSDOT] asking if [my company] has been paid. I've called [public agencies] asking about when a contractor was paid. I know that [my company has a prompt payment clause] in all [its] subcontracts. I think the cities and counties [my company] works for and WSDOT make prompt payment to the [prime] contractors. I've called prime [contractors] to ask about payment. After calling one prime for the fourth or fifth time, I was told by an office person that if the owner [of the company] knew I was calling, my [company's] invoice would go to the bottom of the pile for payment." [#27]
- When asked if receiving timely payments is a barrier, a female manager of a Native American-owned, DBE-certified construction company said, "[Getting paid promptly on WSDOT jobs] depends on the prime contractor. It's not necessarily WSDOT holding up payments [to subcontractors]. It's the prime contractor that's not [doing a good job] about notifying subcontractors about delays or problems with payments. This is done without

notifying the subcontractor that [it] won't get a monthly check. But [the subcontractor] doesn't know that until 45 days later and [its] suppliers are [already demanding payment]. If [a subcontractor] does work on a weekly basis, [it] expects that money to come in on the third of each month. If [the payment] doesn't show on the third, then [it] is scrambling, because there are bills to pay. If [the payment] doesn't come in on the tenth, then there are more bills to pay. If [the subcontractor] doesn't get [the payment] until the next month, then [it may] think there will be two checks but there [generally] isn't. That's when the small business gets in trouble. And there is no one at the state level that will verify that the [prime contractor] is paying the subcontractors."

The same interviewee continued to say that monitoring is needed to help prevent fraud regarding the use of small businesses. WSDOT just takes the word of the prime contractor that it has paid its subcontractors. She said, "It's all complaint-driven. WSDOT won't take action unless there is a complaint filed. ... [Our company's owner and I] have had meetings with WSDOT and OMWBE over the past two years. [The owner] walked out of a meeting with WSDOT construction staff because of the comment made that WSDOT doesn't care about the subcontractors and is only concerned about WSDOT's contract with the prime contractor. The issue was that a contractor was not paying [our company] and I had notified WSDOT weekly. I finally sent notices requesting help to the WSDOT director and [a] Federal Highway Administration (FHWA) representative. I started using the blind copy email function to keep FHWA involved. In recent months, FHWA is the only agency that has kept me informed about what is going on about our [company's] complaint. WSDOT may talk to the prime [contractor] but never tells [the subcontractor] about it. When payments were made by prime contractors [to our company] after [it] complained to WSDOT and FHWA about not being paid, [it] didn't get any interest on the [late] payment." [#32]

■ A manager with a woman-owned, DBE certified construction company reported that it is harder to get paid on WSDOT projects than in the past. She explained, "What I have noticed the last few years, [is that] it's getting worse and worse. Getting paid is taking longer and longer. [It] goes into 90 to 120 days, and [the company has] supplies, payroll, and everything else [to pay for]. Again [the payment time] depends on which office you're dealing with." She further explained, "It seems to me [that WSDOT has] just [had] a lot of cutbacks." She said the cutbacks and personnel movements have left some of the offices with inexperienced people that don't understand how the system works and are not very helpful to the contractors. [#19]

Some interviewees said that they typically do not have difficulty getting paid on WSDOT contracts. For example:

- The female Asian American principal in an Asian American-owned, MBE/DBE-certified engineering company said, "[Our firm] doesn't have a problem receiving payment on WSDOT jobs, normally, because I think WSDOT has some sort of compliance enforcement." [#1]
- When asked if getting paid on WSDOT projects is a problem, the white male owner of a construction materials supply company said, "It used to be a problem, [but] it's not a problem anymore." He said that changed 10 or 12 years ago. He said he hasn't had much problem with WSDOT's administration of contracts. He also said he has had some problems with slow payment on private sector work but generally it is pretty good. [#2]

Potential for discrimination against MBE/WBEs. The study team asked minority and female business owners whether their firms were affected by slow payment or non-payment because of discrimination. Although some said that slow payment was due, at least in part, to race- or gender- based discrimination, most did not think that it was due to discrimination. Examples of those comments include the following:

- When asked whether any race- or gender-based discrimination affects the timeliness of payments, the female owner of a DBE-certified construction company replied, "Oh yeah, because [general contractors] know that's how they can hurt you. … If you're a DBE, there's a perception, and it's probably justified, that you don't have the financial wherewithal to do the job. … The best way you kill off a sub of any kind, let alone a DBE sub, is you don't pay them." [#40]
- The Hispanic American co-owner of a construction business said that his firm is sometimes targeted for slow payment by a prime contractor, but that he does not think it is because his firm is minority-owned. [#26]
- The female manager of a woman-owned, DBE-certified construction company said that her firm is affected by slow payments, but that the firm is not targeted because it is female-owned. "No, I think everyone's payments are slow, from what I'm hearing from other contractors." [#19]
- Managers of a Native American-owned, DBE-certified engineering firm said that they are affected by occasional non-payment, and it is almost always at the hands of majority-owned firms. They did not attribute non-payment to discrimination, however. [#6]
- The female owner of a DBE-certified specialty construction firm said, "I don't think contractors squeeze more money from small businesses based on race or gender. [It is done] to all small businesses. But not all contractors are that way." [#27]
- The female Asian American principal in an Asian American-owned, MBE/DBE-certified engineering company said, "I don't think that it's directed to [our firm] being a minority firm, I think its directed at [the firm] being a subconsultant. [Unfortunately, small firms] don't have any recourse. [The company] just [has to] wait [for payment]." [#1]

Some interviewees said that prime contractors did discriminate against minority-owned firms.

For example, when asked if his company had experienced discrimination in payments the African American owner of a DBE-certified trucking and specialty contracting company said that he sees discrimination when a prime contractor refuses to pay invoices and the small subcontractor is forced to accept a smaller amount or get nothing at all. He said that he believes that this is blatant discrimination against MBEs. [#36]

Taxes. One interviewee explained how he thought a new tax was a barrier to subcontractors. The president of an engineering industry trade association explained how a new tax is a barrier to subcontractors. He said subcontractor markups and DBE goals make it more difficult for firms to be profitable, because of the local Business & Occupation (B&O) tax. He said, "A firm that subcontracts out work has more costs than it would if it didn't, [because of the B&O tax]. ... We have a gross receipts tax called the Business & Occupation tax. If I got a \$100 contract and I get \$100 in revenue, I pay the gross receipts tax on that \$100. If got a \$100 contract and I perform \$20 of it, and I subcontract out [\$80 of it], I still pay tax on the \$100. It's a huge disincentive to

subcontract." He went on to say that unless there is some way to recapture those costs and the additional risk of subcontracting out work, there just is not any incentive to subcontract out work. [#38]

Experience with WSDOT processes. In addition to factors common to contracting among public agencies in Washington, interviewees had many comments specific to WSDOT processes.

Some interviewees said that WSDOT was as easy to pursue contracts with or work for as other public agencies. For example:

- The president of an engineering industry trade association commented that, in general, his organization's members have reported good experiences working with WSDOT. "Generally speaking, members think [WSDOT] is a good client that they're fairer to contract with, easier to contract with, that WSDOT understands the process better than [other public sector clients So [WSDOT's] held in fairly high regard." [#38]
- The female owner of a DBE-certified construction company indicated that working with WSDOT is better than working with other local public agencies, because they follow their own rules. "Overall, if I had my pick ... I'd probably pick the [WSDOT] project, because they follow their own rules better than the cities that are the beneficiaries of local programs. ... [WSDOT] has the Office of Equal Opportunity in place, they have DBE support services in place. So, they have subagencies that are part of WSDOT to administer the rules for their own projects as well as those that flow through their Local Programs, so they're more inclined to follow [the rules]." [#40]
- When asked if the WSDOT project his company worked on was easier or harder than other public sector jobs, a white male representative of a non-certified construction company said, "Probably a little bit easier, but not much. [It was] easier probably because of [better] access. Other than that it was pretty much comparable. Quality control was there, which I think is a good thing." He added that "[Payment] was a little slow [on that project], but I don't know why." [#34]
- The white female owner of a DBE-certified specialty contracting company said bidding as a prime contractor requires a lot of paperwork, but beyond that, it's relatively easy to do.

 There are prompt payments that go right into [the company's bank] account." [#12]
- The general manager of a woman-owned, DBE-certified specialty contracting company explained that all their DBE certified services are for WSDOT. "It is easier [to find out about WSDOT opportunities than other public agency projects], and the bidding process is easier; it's more uniform. ... [The company is prequalified with WSDOT as a prime contractor]. The process was good, no problems." [#18]
- When it came to the WSDOT bid process, the female manager of a Native American-owned, DBE-certified construction company said, "WSDOT's bid process is probably easier than other agencies because WSDOT outlines the quantities and items. [The company] can then make estimates on those quantities. Some regions tend to be way off on quantities, but most are close." [#32]
- The white male general manager of a general contracting company reported, "I've found that learning about WSDOT opportunities are the same [as other public jobs]. The bid process seems about the same [as other public agencies, also]. [The prequalification process

- with WSDOT] is a little more difficult than Idaho or Montana. WSDOT has more scrutiny than those agencies, especially concerning financial statements and experience." [#33]
- With regard to learning about WSDOT projects, the African American owner of a DBE-certified specialty contracting company said, "It's easier to find out about WSDOT work than other public sector work, because the [projects] are in the Daily Journal of Commerce. WSDOT also sends out a pamphlet about every two weeks with all the jobs listed in it. It's not hard to find out where the jobs are." [#35]

Some business owners and managers described what they perceived as a lack of business opportunities at WSDOT. Examples of those comments include the following:

- The white male owner of a survey company said, that WSDOT survey work had dried up. "There haven't been a large number of WSDOT projects in this area lately. The jobs that I can think of were too big for [my firm] to handle." [#5]
- The white female CEO and co-owner of a WBE-certified construction company said, "[Our company] has not worked on a WSDOT job. Most of the [projects I see listed have a scope of work that it] just doesn't do. [The company] doesn't really do concrete paving much." [#11]
- The president of an engineering industry trade association explained, "The biggest issue with the industry and with [WSDOT] in this market has been the contracting out issue. ...

 [WSDOT] self-performs an inordinate amount of their own work [compared with other state departments of transportation]." He stated that some of that self-performance was the result of WSDOT passing a measure that encouraged prime contractors to subcontract out more work. Then, they predicted that the local engineering companies could not fulfill the resulting demand, so they over-hired to handle the expected demand, which resulted in WSDOT bringing more engineering contracts back in-house to keep their people busy. He estimated, "70 percent to 95 percent [of WSDOT engineering work] is done in-house." He said that WSDOT staffs its engineering department to complete the peak level of work, which is neither efficient nor good for the local engineering industry. [#38]
- Managers of a Native American-owned, DBE-certified engineering firm said, "The local WSDOT district office does not put out any calls for bids for A&E firms. [That practice is a huge barrier]." They added that the local WSDOT office performs engineering work with its own staff and does not contract work out. [#6]

Some interviewees had general comments indicating that WSDOT bidding processes were difficult to navigate for firms new to the agency. For example:

The president of an engineering industry trade association expressed some misgivings about WSDOT's audit office. He said, "The level of dissatisfaction with the audit process over the last two years has heightened dramatically ... at every level, from little firms ... to big firms." He said that the dissatisfaction was primarily related to the method used "to determine a firm's overhead rate. ... what's allowable and what's not allowable." He said that the problems with the audit office disproportionately affect small businesses "because a lot of large businesses have other resources to get their audits ... and they don't have to rely on the WSDOT audit for their overhead rate. ... And, small firms don't have the resources to fight back." [#38]

- When asked if the bid process is easier or harder with WSDOT, the representatives of a large publicly-owned concrete company replied, "Both. WSDOT has an electronic bid site, but if you don't understand it, then it's more difficult. Even if the project's in the local area, the bid [process] is [administered] in Olympia. It can be easier if you are familiar with the BidX software that they supply. I think it's a pretty easy process. It can't be done without the proper paperwork [so you can't make the mistake of using the wrong forms]. If you hand deliver it, it can be denied because of improper forms. [The company] has been denied bids because [it] didn't use the proper form, even though [it] was following the procedure as spelled out in the Special Conditions part of the [Invitation to] Bid. The form had been changed and the form in the bid [our company] submitted was then incorrect, so the bid was denied." [#15]
- The African American owner of an MBE/DBE-certified engineering company said, "[My firm] hasn't done a lot of work with WSDOT. Early on [my firm's personnel] were trying to understand the WSDOT system a little bit, which seemed a bit difficult for [them] to understand, [its] overall system, how a company actually had to chase the WSDOT work. The agency had things in [its] regional offices, and it was difficult for [my firm's people] to find the right person to talk to, to try to identify who it was [they] needed to be marketing to." [#8]

One business owner indicated that WSDOT insurance requirements adversely affects small businesses. The female owner of a WBE-certified consulting firm wrote that WSDOT insurance requirements are unreasonable. For example, she uses a personal vehicle for work and has found it unreasonable to obtain \$1 million of insurance for the vehicle. She also had to obtain insurance for the small cubicle that is her workspace. "Between the premise insurance and the auto insurance I pay an additional \$1,500 per month for insurance It is simply done in order to check a box on WSDOT's requirements that have no relevance to real life non-engineering professional services." [WT#12]

Some interviewees said that WSDOT prequalification was too involved or intrusive. For example, the female co-owner of a non-certified construction company said that her company has not bid for or worked on WSDOT projects. She said, "[The company] is interested in WSDOT jobs. I signed the company up on the WSDOT [small] works roster. WSDOT wanted financials and other paperwork, and I just didn't think that was necessary." She said the WSDOT prequalification process is too involved and intrusive. She feels that a company with their history and reputation should qualify based on past results and not need to submit financials. [#24]

Some interviewees commented that size of contracts at WSDOT presented a barrier to bidding, or that it was difficult for smaller firms to get work with WSDOT. For example:

- The female Asian American principal in an Asian American-owned, MBE/DBE-certified engineering company said, "[My firm has] been on a number of contracts for WSDOT. [It] can't be a prime consultant because of size of projects. Lately, WSDOT seems to have just mega projects, and has no funding for multiple smaller projects like [it] used to do." [#1]
- The female owner of a WBE/DBE-certified engineering company wrote that WSDOT should "consider breaking projects/contracts down into smaller pieces so that DBEs have the ability to be competitive." She gave the example of a WSDOT Request for Qualifications for her line of work. "We considered providing a submittal for that work, however, after

- reading the requirements it was clear that a large environmental consulting firm would be picked and that our firm would not be competitive because we could only provide a subset of the services requested. If WSDOT had broken down the RFQ into smaller pieces we would have provided a submittal for that work." [WT#10]
- The Hispanic American owner of a DBE-certified engineering firm reported that his firm has tried for years to do work for WSDOT but has been unsuccessful. WSDOT considers [it] a 'micro' business. "[It's] too small. [WSDOT] always guides [my firm] to go seek the prime contractors. WSDOT is not an advocate for small businesses like mine with the prime contractors." When asked what he would suggest to improve the ability of small firms to do business with WSDOT, he said, "There is so much bureaucracy [at WSDOT], how does one change that?" [#7]
- A principal of a DBE-certified planning firm indicated that the firm had been "deliberately overlooked" to participate in WSDOT work. [WT#1]
- The white male owner of an SBA-certified specialty construction company stated, "[My company] has not attempted to do work with WSDOT but [it] would like to. ... Most WSDOT projects I have seen have gone to bigger companies that are going after and getting jobs [that those companies] would not have looked at in previous years." He said, "I have seen [other contractors] bid too low on jobs and then [it] can't afford to do it." [#21]
- According to the female majority owner of a non-certified specialty construction company "[The company] is pre-qualified with WSDOT for [specialty work], up to \$200,000. [However, the company] has never worked on a WSDOT project. There just hasn't been the opportunity to bid on any WSDOT work [in the company's specialty]. ... WSDOT sends out a list regularly so it's very easy, assuming all the jobs are listed. Oregon doesn't do that. I really like WSDOT and what [it] does [to inform contractors of projects]." [#30]
- When asked about what work her company has done for WSDOT, the female manager of a Native American-owned, DBE-certified construction company explained, "[Our company] has done [no work for WSDOT] as a prime [contractor]. [I work on] the bidding process and [I] get on [the agency] web page and find out what's bidding, or [check at] the plan centers. Working with WSDOT, [I have found that] some regions are more friendly than others, [as far as] being open to communication. The majority of the WSDOT people will [say], '[WSDOT] doesn't have a contract with [your company], go through the prime.'" [#32]
- When asked what recommendations he has to improve WSDOT's administration of contracts or payment methods, the African American owner of a DBE-certified trucking and specialty contracting company said, "WSDOT should contract directly with DBEs. DBEs need to be able to get mobilization money, even as a subcontractor. I'd like to see the prompt payment provisions in the prime [contractor's] contracts enforced. WSDOT should make sure that if the prime [contractor] has payment issues, payment to lower tiered subcontractors should not be held up if there are no issues with the subcontractor." [#36]

Some interviewees had comments concerning WSDOT's approval of overhead rates for engineering and other professional services contracts. Examples of those comments include the following:

- The Subcontinent Asian American male owner of a certified engineering firm described a specific problem with a WSDOT rate auditor. "The end result is that they refused to give us an overhead rate, so we didn't do any WSDOT work for almost two years." He described that situation as a frustrating issue. It got cleared up eventually but he said they might have otherwise worked on a couple of WSDOT projects during that time. [#10]
- The president of an engineering industry trade association described an emerging problem when he mentioned that WSDOT's auditing office is beginning to disallow marketing costs in determining overhead rates and that such costs were allowed in the past. He indicated that such practices make it more difficult for firms to be profitable. [#38]

Some business owners discussed what they perceived as difficult or inconsistent inspections or contract management by WSDOT. For example:

- The co-owner of a concrete company reported that his company had done a lot of work with WSDOT as a subcontractor. He indicated that it is easy to learn about and bid on WSDOT work. (He only works as a subcontractor on WSDOT projects. His company is not prequalified with WSDOT as a prime contractor.) The co-owner did indicate that it is harder to work with WSDOT than with other public agencies. He explained, "Oh, it's harder to work with WSDOT. Just their material approval and their inspections … their material inspectors are very difficult to work with sometimes." He also said, "There are some specifications that are overlooked in some areas and strictly held to in others." He reported that getting paid had not been a problem for his company on WSDOT jobs. [#17]
- A manager of a woman-owned, DBE-certified construction firm reported difficulty working with WSDOT contract specifications and WSDOT inspectors. "The problem that [our company] has had is that it seems like [each WSDOT inspector] interprets [the contract specifications] in [his or her] own way. If [our company owner] tries to tell [an inexperienced] inspector, 'I have a crew that's done this for 20 years', [the inspector] won't work with [our company] on it, when [our crew] knows [what it's doing]. [The owner of the company has] had to force [the inspector] to call [his or her] boss to get permission [to do it the correct way] because [the inspector] has read something in the [contract] specifications and [disagreed with our crew's methods]." [#19]
- When asked what it's like to work on a WSDOT project, the female Asian American principal of an Asian American-owned, MBE/DBE-certified engineering company said, "It always depends on the project manager. There are some project managers who are fine and great, and others who just like to make trouble make work for people. It's the same for King County or Sound Transit, too ... I say they are not necessarily harder or easier, but I think they are little more bureaucratic. To get the contract up and running is onerous." [#1]
- Representatives of a large publicly-owned concrete company said, "It's harder to work for WSDOT than some other agencies because there are a lot of variations in inspector's interpretations and motives. [Financial implications can skew] an inspector's interpretation. And there's been a lot of turnover in WSDOT in the past five years. The

- experience level of their field level is not very high. [Senior people] are retiring. Sometimes there is poor design, or change of conditions, but the inspectors seem to be under a tremendous amount of pressure not to issue change orders, because it might make the agency look bad as a whole. The inspectors are rated on change orders or changes in the projects, so sometimes they make decisions based on that instead of what is best for the project." [#15]
- The general manager of a woman-owned, DBE-certified specialty contracting company explained, "It can be harder [to work with WSDOT than other agencies] because the interpretation of the specifications vary from one office to the next. It can also be simpler because it's pretty clear what to do. The difficulty is that [one never really] knows how the inspector is going to enforce the rules. ... [In recent years there has been some denigration in the WSDOT inspection process]. WSDOT doesn't have enough people to adequately do it. There are delays in getting answers back to some of the technical questions [that companies] have. The office people are overburdened. The new WSDOT employees are not nearly as qualified and seem to be the ones that want to interpret the specs however [the person] wants. Lots of the long term employees at WSDOT have retired and their replacements have a long learning process." He continued, "WSDOT, in the last 18 months, has experienced extreme pressure for the [required] paperwork, and the technique that they use is to withhold payment if there is the slightest problem." He gave an example of withholding a large payment because of a very small problem. "WSDOT, by and large, has improved because of massive complaints about this [subject]." [#18]

Some business owners who often work as subcontractors had positive comments about WSDOT's bid processes and some had negative comments. Examples of positive comments include the following:

- The Asian-Pacific American owner of a DBE-certified engineering company said that WSDOT is a little easier to deal with than other agencies "because as a sub there is very little information [the firm] needs to give them" when competing for work. He went on to say, "That is unlike the information required by King County, the City of Seattle, and other agencies in Washington State." [#3]
- When asked if his company had done work on a WSDOT project, the white male representative of a woman-owned, non-certified construction company said, "Yes, [the company] worked as a subcontractor for another subcontractor on [a WSDOT project]." He went on to say that his [company] got the WSDOT job the same way [it] gets most of [its] jobs a contractor knew of his company, called him up, and asked his [company] to work on the job. There was no bid process." [#34]
- After describing the practice of contractors asking DBEs to be exclusive to one team, a white female manager for an MBE/DBE/SBA certified engineering company commented, "I think Sound Transit doesn't allow DBEs to be exclusive on teams. WSDOT is not that way." [#9]
- Explaining what it is like to work as a subcontractor on WSDOT projects, the female manager of a Native American-owned, DBE-certified construction company said, "When [the crew is] out in the field, if there's an issue, [the company's owner] would go to the prime [contractor], and point out something that needs to be changed, and the WSDOT project engineer will come out and [our owner] has a pretty good rapport with these project engineers with WSDOT. After working with [our owner, the WSDOT project

engineers] are respectful of his work, and [believe] that he is not trying to rip them off or cause more work. He's [attempting to] make the work easier for everyone." [#32]

There were also mixed comments about WSDOT's processes from subcontractors:

- The white female owner of a DBE-certified specialty contracting company said, "[My company has worked on WSDOT projects]. It completely varies by district. ... [My company's work for WSDOT] is mostly as a subcontractor." She said that finding out about WSDOT projects was easier than at other agencies. "WSDOT has a great website." However, she said that the bid process is harder with WSDOT than some other agencies, because of "changing rules." [#12]
- The white male owner of a specialty contracting company stated, "The WSDOT website is good for finding the jobs that are coming up. ... Also, as a subcontractor, [my company] does not need to be prequalified. I go on the website, I see what's coming up, I see what contractors are bidding on the job, and I contact them directly [to market my company's services]. ... It's harder [to get paid by WSDOT than other public agencies]. That's what I hear from my prime contractor customers." [#20]
- The African American owner of an MBE and DBE certified trucking and specialty contracting company, said, "[Working with WSDOT] is no different than doing other work. However, getting paid on WSDOT projects is slow because [the prime contractor] finds reasons to delay payment." [#36]

Examples of somewhat negative comments from subcontractors include the following:

- The female manager of a Native American-owned, DBE-certified construction company said that sometimes the project plans do not match reality, and when those situations are brought to the attention of the WSDOT project manager, he will sometimes say, 'Make it work' or will tell the crew to change the specifications but will not take responsibility. She said, "[The WSDOT project manager] won't put anything in writing, [and] won't initial 'Ok'd by'. [He] will refuse. [WSDOT has] actually re-written the spec book to state that the [subcontractor] is doing it at [its] own risk." [#32]
- The African American owner of a DBE-certified specialty contracting company said, "[The bid process for WSDOT] is about the same [as other public sector jobs], because I [place bids for my company] as a subcontractor. I would like to see WSDOT bid these small jobs as separate contracts. It would make all the difference." He went on to say, "I'd like to see the public sector asking directly for services, to cut the [specialty services provided by this company] out of the prime contractor's bid package. Because right now, [my company] can't stay on the job from the beginning to the end. [It] is only being used to help the prime [contractor] to cover [its] DBE quota. I believe if [my company] was contracted directly with WSDOT, [it] would complete the hours that were identified in [its] bid. It would be harder for WSDOT to blatantly discriminate with [my company's] portion of the contract. With the prime [contractor], there is no policing of [its] contract. I believe that a contract directly with WSDOT would have more accountability" [#35]
- As for bidding on WSDOT projects, the manager of a woman-owned, DBE-certified construction company said, "[Our company] doesn't do work as a prime, so [the bidding processes] are all pretty much the same [between public agencies] for subcontracting." One

exception she identified was WSDOT design-build contracts. "Extremely difficult to bid, especially as a subcontractor. [Our company] has decided not to bid on a few of [the design-builds] just because I can't figure it out. There would be so many questions, and so many variables and factors. There were a couple [projects] that [our company] tried to bid but I couldn't get all the answers in time. And so many exclusions and inclusions [need to be added]. There are just too many variations. If [the company] gets on the job, then [it] has to [do] change orders at least 15 times, [and that's just for my part of the contract]." [#19]

Some interviewees recommended changes in WSDOT processes. For example:

- The female owner of a DBE-certified construction company indicated that she would really like to see some sort of proof of payment mechanism in place to ensure that DBEs are being paid in a timely manner and for the amounts that they are owed. She said, "What I would really like to see and I think it would put an end to a lot of the problems that DBEs face and I know it would help more of them stay in business is a proof of payment mechanism so that the agency knows that the DBE sub is getting paid every month." She said that a similar measure is being used on a large construction project that is going on right now in Washington and, "If [WSDOT] only did one thing ... and they required proof of payment [to subcontractors] every month ... that would be great." [#40]
- A principal of a DBE-certified planning firm wrote that WSDOT could more widely advertise its contracts to registered MBE/WBEs. [WT#1]
- A manager of a majority-owned construction materials manufacturer stated, "The bid processes are something like 100,000 pages long. WSDOT does bid conference calls and should continue to do that. But, WSDOT should be more open to vendor's questions, and not be so vague about giving out answers. WSDOT needs to be sure to have the right people on the conference call to answer the questions during the call." [#23]
- The Subcontinent Asian American male owner of a certified engineering firm said that WSDOT projects typically do not have the pre-proposal meetings that, for example, Sound Transit might have, and that makes it more challenging to get WSDOT work. He said, "If there's some way to make it easier to see who the potential bidders are for a [Request for Qualifications] prior to submitting [a] bid, it would help the small businesses contact those potential bidders." [#10]
- When asked if they had any recommendations for WSDOT as to how to improve their notification for bid processes, representatives of a large publicly-owned concrete company said, "There is a form that must be submitted with the bid that the DBE contractor must sign. It says the DBE contractor agrees that it will do the scope outlined for a particular price. It's very difficult to get that done because price quotes come in at the last minute. [In addition], the DBE is frequently not as organized as larger companies and may not completely understand the bidding process and getting information from the DBE may be difficult as compared to larger companies." [#15]

■ When asked if WSDOT could make any improvements in contract or payment methods, representatives of a large publicly-owned concrete company said, "Stop requiring every independent trucker to have to submit certified payrolls and affidavits. Let the trucker be a trucker, not a subcontractor. That would help tremendously. These people are trying to make a living, they work on it at night, and they might be on the project for only two days." [#15]

Owners and managers of several companies had comments about processes concerning design-build contracts. Examples of those comments include the following:

- According to representatives of a large publicly-owned concrete company, "[It is challenging to submit bids to the prime contractors on design-build projects because] most design-builders don't want to share enough information [to really submit a good bid], because they don't want another bidder to find that information out. If there are four design-build prime contractors bidding on the project, [our company] will submit four different bids with different prices [based on what that prime contractor shares with us]. It's like four different projects. Another problem is that [our company] might put time into a bid for a design-build project, and then the winning bidder can negotiate that out or change almost everything about that scope during contract talks with the project owner. It would be nice if the bidder had to list who [it] planned to use when [it] submits [its] bid [so that the subcontractors are locked in]." [#15]
- The African American owner of a DBE-certified specialty contracting company said that he doesn't know how public owners select design-build contractors. He said that the design-build process seems to open up the doors to allow the prime contractor to discriminate against DBEs, because it doesn't have to list the subcontractors when it submits its proposals. [#35]

Some business owners had observations concerning payment and retainage on WSDOT contracts. For example:

The African American owner of a DBE-certified specialty contracting company said, "There are two problems with WSDOT projects. First, [my company] is waiting 60-65 days to get payment for the first month of invoices [it] has turned in. The employees have to be paid and fuel has to be purchased, so the expenses are double [by the time payment is received]. All the primes blame it on WSDOT. Second is retainage. There is no reason why retainage should be held for [our service]. At the end of the job, at the end of the day, what has [my company] not done? ... Think about that. ... WSDOT allows the prime to hold 5 percent retainage on any sub's contracts. We're working for a prime that we've finished working for and the prime is going to try to withhold our retainage for two years, until the end of the job." It's harder to get paid on WSDOT work because of the nature of the project. [The contract administration is more arduous than on other public sector projects]." When asked what recommendations he would have for WSDOT related to improving WSDOT's administration of contracts or payments, the interviewee said, "First, DBEs should be paid every 15 days, with proper invoicing. Retainage should be [discipline specific and a process should be put in place for early release of retainage]. That is, the sub shouldn't have to wait until the end of the job to get [its] retainage." He added, "DBEs have to rely on the prime contractor to advance [it] money. Inconsistent cash flow with small DBE firms makes

- it extremely difficult to mobilize. [Most] prime contractors won't allow [the small DBE firms] to have mobilization money, [which is paid prior to the job actually starting]." [#35]
- The female owner of a WBE-certified consulting firm wrote, "Slow payment processes ... make it very difficult if not impossible for a small business to work on a WSDOT project." She explained that her company has been affected by slow payment by the prime contractor on a WSDOT project. She indicated that the prime contractor was not at fault it paid her company promptly, but that two and a half months passed between submitting her invoice and payment by WSDOT. She reported that WSDOT processes had the effect of requiring small businesses to finance almost four months' worth of work in order to do business with WSDOT. "Four months is a huge financial commitment, especially for those who have employees and must make payroll and taxes irrespective of whether they have been paid or not." She went on to write, "This process is in direct conflict with state law and federal laws when federal monies are appropriated." [WT#12]
- The vice president of a small DBE construction company wrote that the State of Washington should do more to ensure that prime contractors are paying their subcontractors and materials suppliers. "The State needs to have someone checking this constantly or have written proof from the subs, to make sure the subs are getting paid." She reported that she knew of other subcontractors that, like her company, are not paid by the prime contractor within the 10-day window of when the prime is paid by municipalities or the State. [WT#6]
- A participant at an association meeting shared feedback from the local construction contracting community. "I even know a company that transitioned from residential construction into public works not really understanding retention aspects of it. Now, unfortunately, that company is out of business because of the fact that they ruined their cash flow just by not being able to collect on any kind of retention." [DBEP#1]
- A discussion participant representing a diversity program office stated, "I think that the whole issue of retaining is very real because we have got a return of retainage a process that we put in place and that serves us well and in the last couple of years going forward we still have firms that have not gotten their retention from their initial segment and based on the way the contracts were set up at that time puts them at a disadvantage in terms of trying to get those together." [DBEP#5]
- A discussion participant representing WSDOT stated, "... WSDOT does not hold retainage from prime contractors anymore. Therefore, primes should not be withholding retainage from DBEs." He continued, "But it is a huge problem in the state of Washington right now. I am probably dealing with, on average, on a weekly basis, prompt payment and retainment complaints from five to seven or eight DBE firms." [DBEP#6]

F. Allegations of Unfair Treatment

Interviewees discussed potential areas of unfair treatment, including:

- Bid shopping (page 87);
- Bid manipulation (page 90);
- Potential for discrimination against minority- and women-owned subcontractors (page 92);
- Treatment by prime contractors and customers during performance of the work (page 93);

- Unfavorable work environment for minorities or women (page 95); and
- Approval of work by prime contractors and customers (*page 97*).

Bid shopping. Business owners and managers often reported being concerned about bid shopping and the opportunity for unfair denial of contracts and subcontracts through that practice.

Many interviewees indicated that bid shopping was prevalent in the local construction industry. [for example, #5, #24, #11, #19, #20, #22, #34, #28] Examples of those comments include the following:

- A public hearing participant and owner of a DBE-certified construction company stated, "Some contractors I won't pull, because they still shop my bid. It's still going on and on and you think it will stop after 36 years, but it is still the same thing." [VNP#3]
- When asked if bid shopping was a barrier to doing business, the co-owner of a concrete construction company said, "That's always present. It'd be really nice to figure out how to isolate where it comes from. I mean, [my company has] lost work [because of bid shopping]. [Other companies' representatives have] come in five minutes before the bid opening and obviously cut [my company's] price by just enough to get underneath [the bid submitted by my company], and work [has been] lost that way." [#17]
- The female owner of a DBE-certified construction company said that she is aware of issues of bid shopping and bid manipulation but that they are "very difficult, if not impossible to prove." She said that she brought a legal case with her prior company in which they felt that they were the victims of bid shopping, and they ended up settling out of court. [#40]
- The Hispanic American co-owner of a construction company said, "[The company will] get the feeling from two or three contractors that we were low on a job, and [later] when [our company representative] talks to the general contractor's [project manager] he'll say, 'You're not low anymore.' Well, that word, 'anymore,' it's like, 'How'd that happen?' [The prime contractors] do it sneakily. It's done by talking about scope. 'The other guy [included more work].'" [#26]
- The Native American owner of a DBE-certified construction company wrote, "[My company] has also experienced the situation where its bids have been solicited by general contractors, but solely so the general contractor could use [my company's] price as leverage to obtain a lower price from the general contractor's 'preferred subcontractor.' In fact, there is one company [my firm] no longer bids to because of this sort of bid shopping."
- The Hispanic American owner of a non-certified construction company said, "I had [bid shopping] happen with a restaurant I bid on. I got awarded the bid and then they took it away and gave it to another company for less." [#29]
- When asked about bid shopping, representatives of a concrete company stated, "That's a concern, and more so over the last few years. We might hear from one contractor that they used the [bid] number [received from our company] and then when the job goes to work some [other company] has a lower number, or the [agency] somehow got a revised quote five minutes prior to bid, so now [it] has to use that lower number." [#15]

- The white male owner of an SBA-certified specialty construction company reported, "Oh yeah. Most of the time [bid shopping is] in the private sector." When asked how he knew his [company's] bids were shopped around, he said, "I know most of the contractors doing the same kind of work, and [there is] talk." He gave an example of a recent job that his company and a competitor of his both bid on. The competitor had bid about \$150 higher than his company's bid and the contractor used his company's bid to get his competitor to lower its bid." [#21]
- The female manager of a Native American-owned, DBE-certified construction company said, "[Our company] has been told by prime [contractors] that [it] provided bids way too late and, 'Don't bother sending us bids anymore'. It's hard to know the right time to submit bids to prime [contractors], because if the prime [contractors receive the] bids too early, some will shop the bids around. [For example], I have checked around with prime contractors on a project and found that our [company's] concrete bid was low, but the prime contractor that actually won the bid for the contract used another concrete company, saying that [it] had received a lower bid, even though none of the other prime contractors received that bid. And, being in a small community, [a company] just can't do that kind of stuff. [Our company] doesn't work with prime contractors that work that way." [#32]
- The female majority owner of a non-certified specialty construction company said, "[Bid shopping] happens all the time. It's a nasty part of the bid procedure." [#30]

Some interviewees reported that bid shopping occurs on public as well as private sector contracts. Examples of such comments include the following:

- The female manager of a Native American-owned, DBE-certified construction company said, "Bid shopping is out there. You can't prove it though. Bid shopping has gone on for years and years. I don't know how WSDOT could prevent bid shopping. Bid shopping is more prevalent in the public sector than the private sector. Money talks and the prime contractors want to make as much as [possible]." [#32]
- The white male owner of a construction materials supply company said, "Oh yeah. I don't deal with that well, peddling prices. Some of the bigger outfits do that, under the cuff, and I always try to catch them doing it. [My company] doesn't work with [those companies] very often." He said that he sees bid shopping on both private and public projects. "I call it 'peddling prices,'" he said. "When two people are talking on the phone or meeting for lunch, how are you going to police that? I don't see how it can be policed." [#2]
- When asked if the bidding process can be a barrier, the African American owner of a DBE-certified trucking and specialty contracting company said, "Yes. Primes are shopping bids and are intertwined with DBE fronts, so what is done is the [prime contractor] takes the bids in and that shows [the front company] where the price is and then [it] gives the job to [its] favorite DBE front [company]." [#36]

Owners and managers of engineering firms also reported that bid shopping affects them. For example, when asked if bid shopping is a barrier, the Asian-Pacific American owner of a DBE-certified engineering firm said "Yeah, I'd call that a barrier. This comes up in my industry." In the private sector, his firm is told that its bid is higher than another bid. [#3]

Some owners of DBE-certified firms said that prime contractors sometimes target DBEs for bid shopping. Examples of those comments include the following:

- The female owner of a DBE-certified specialty construction firm said, "I hate that. It does occur. No one will ever be able to prove it. When a general contractor calls because it has to have DBE participation and meet good faith efforts, [it then asks for a bid that it uses to shop for other bids]. This has compounded the bid shopping problems." [#27]
- When asked if bid shopping is a barrier, the African American owner of a DBE-certified trucking and specialty contracting company said, "Yes, [bid shopping is a barrier] in every job that requires DBE participation." [#36]
- The African American owner of a DBE-certified specialty contracting company, "Yes. It has been a barrier. There's no way to prove the prime [contractor] is doing it. [My company] has been on three jobs recently where I know the prime [contractor] shopped [my company's] bids. [My company] was working on a job and got removed and the next DBE showed up with a lower price." [#35]

Some prime contractors reported that they do not practice in bid shopping. For example:

- The white female co-owner of a non-certified construction company said that bid shopping isn't a problem with prime contractors or a problem when the company solicits bids for subcontracts. She said, "[Our company] doesn't take [subcontract] prices that are submitted after bid opening." [#31]
- One prime contractor explained how subcontractors' fear of bid-shopping affects his business. The white male owner of an SBA-certified specialty construction company said, "[Yes, there's bid shopping] in the private sector, and actually in the public sector, also. It's a huge problem. When I try to bid a job as a prime [contractor for my company], I can't get prices from anyone on the parts of the job [my company] doesn't do. For me to bid a job, I have to know what it'll cost [my company] so I can find out if [its] bonding will be high enough. I might get bids at the last minute from subcontractors but that's too late. The subcontractors are trying to minimize bid shopping but it is a problem for me in preparing a bid. The subcontractors won't give prices out until the very, very last minute because [frequent bid shopping has] just turned it into a circus. This problem is on the private and public side." [#25]

Some owners and managers of construction firms reported that they do not see bid shopping, or that it is not a big issue. For example:

- The president of an engineering industry trade association stated, "I haven't seen too much of that," because most professional services contracts are subject to qualifications-based awards, where price plays a limited role. He did say that sometimes public agencies go through the "ghost solicitation process" where they already know who they want to hire for the contract but they go through the formal solicitation process anyway. [#38]
- The white female owner of a DBE-certified specialty contracting company said, "No, this [bid shopping] isn't a big issue." [#12]
- The general manager of a woman-owned, DBE-certified specialty contracting company reported that he did not know of any bid shopping. [#18]

■ When asked if bid shopping is a barrier, the white male general manager of a general contracting company said, "No, I haven't seen much of that." [#33]

Bid manipulation. Beyond bid shopping, a number of interviewees discussed bid manipulation.

Many interviewees said that bid manipulation affected their industry, and that it was common. For example:

- Concerning bid manipulation, the white male owner of a construction company said, "In the private sector, in about one job out of 20 there's an attempt on behalf of a customer to pick and choose services from a complete proposal, or pressure to modify portions of a proposal because [the customer] feels that [another company] may give [him or her] a lower price for that single portion." [#22]
- When a manager of a majority-owned construction materials manufacturer was asked about bid manipulation being a barrier, she said, "Yes, that has happened to [my company]. [On one procurement], there were three complaints by vendors who bid on the job about this and the public owner had to re-bid." [#23]
- The female co-owner of a non-certified construction company said that they do see bid manipulation on private sector projects, and that it is a barrier. [#24]
- The white female CEO and co-owner of a WBE-certified construction company said, "That happens all the time." [#11]
- Concerning bid manipulation, representatives of a large publicly-owned concrete company said, "It's constant." [#15]
- The general manager of a woman-owned, DBE-certified specialty contracting company said, "Yes, I have seen that. [Our companies] have a little stronger format, because of the DBE, and the [prime contractor] has to sign [the change] and [our management] has to agree to whatever change is made. It used to be an extremely big problem. In the last three years it's really diminished." [#18]
- The African American owner of a DBE-certified specialty contracting company said, "Yes, this has happened." He gave a specific instance involving a prime contractor that had used his company to meet a DBE percentage on a WSDOT project. [#35]
- The African American owner of a DBE-certified trucking and specialty contracting company said, "Yes, that's a big problem." [#36]
- The female owner of a DBE-certified construction company described a situation where a prime contractor is trying to have her firm removed from a project ... because she challenged some of the prime contractor's decisions and because she asked for payment. She explained, "Unbeknownst to me, [the prime contractor] is trying to have me thrown off the job, because I was so bold as to challenge their schedule and to ask for payment. ... They're trying to remove me without cause." [#40]
- A discussion participant representing WSDOT reported an unfair practice that is a barrier to success, "What's going on is you have DBEs submitting sub-bid quotes that [are] inclusive of the equipment ... and the prime contractor is coming back and saying, 'Okay, I will use

- you on this project, I will put you down as condition of award but you are going to use my equipment,' and they are contracting for their labor only. So if the DBE has equipment and they are not using their own equipment that is a [commercially useful function] issue. [DBEP#6]
- A public hearing participant representing a business development company explained that without bid disclosure, DBEs do not know why their bid was not accepted. "So you can throw a number out there, and time after time, you are not selected and you don't know why you were close and so you keep on bidding, so you keep on spending thousands of dollars providing your estimates." [VNP#1]

Some interviewees reported no experiences with bid-manipulation. [for example, #29, #31, #34, #12, #16, #20, #21, #27, #30] A number of business owners and managers said that they were not affected by bid manipulation:

- When asked if bid manipulation is a barrier, the white male general manager of a general contracting company, "No, I see this very rarely." [#33]
- The female owner of a DBE-certified specialty construction firm reported, "No, I haven't had any of that," she also stated, "[I] also have to be careful about asking for feedback from [contractors] if [my company's bid isn't chosen]. [I] can't ask about other [company's] bids and don't want [any questions to be interpreted that way]. [The prime contractor] won't even tell me what the low bid was. The only information [I] can get is what is posted by the agency or [received] through public disclosure requests." [#27]

Some interviewees indicated that they had been denied prime contracts or subcontracts, and that they thought it was due to discrimination or their DBE status. For example:

- The African American owner of an MBE/DBE-certified engineering company told a story of being one of two firms that submitted proposals to be prime contractors on a public sector project, and the agency had said that the work would be split between two companies. He indicated that his firm submitted a proposal with 22 highly qualified professional engineers, and yet it was denied the bid. He said, "[My firm] was snubbed. I have to believe that it was racially motivated because I don't know what other reason [would have prevented my firm from getting a contract]." [#8]
- Managers of a Native American-owned, DBE-certified engineering firm said that they were given misinformation by the office of OMWBE about DBE participation that adversely affected their opportunity of winning the contract. [#6]
- The African American owner of a DBE-certified specialty contracting company said contract denial is a constant problem. His company has been awarded contracts and then has been only used for a part of the projects, maybe only 25 or 30 percent of the projects. Other times his company has been listed as a DBE company by the prime contractor who wins a bid on a public project, but his company has not actually gotten any work on the job. The prime contractor subcontracted the job to a different company or self-performed the work. [#35]
- The African American owner of a DBE-certified trucking and specialty contracting company said that prime contractors engage in contract denial all the time. A minority business will

- be awarded the bid by the prime contractor and then the prime does not use the minority business at all. [#36]
- A white female manager for an MBE/DBE/SBA certified engineering company reported, "One challenge on WSDOT projects is that [our company] can be on the team that wins the contract and after the contract is awarded, [it] has been told [it] has no role, no work. That's happened to [our company] several times." [#9]
- The African American owner of a non-certified consulting firm said that he had no direct experience with contract denial, but is aware of it happening to others. He explained, "During the bidding process there is an agreement on the scope of work that the minority company will do, then later the scope for the minority company shrinks. It is hard for minority firms to raise their voice about those situations." [#4]
- A white female manager for an MBE/DBE/SBA certified engineering company said, "[In terms of reductions in the company's work as a subcontractor after contracts have been awarded], I don't think that has anything to do with race. I think it is the prime [contractor] looking out for [itself]. This is a problem for small businesses. The prime [contractor] can take advantage of something and so [it] does. If the [prime contractor] isn't held accountable, [it] will keep the work for [itself]." [#9]

Potential for discrimination against minority- and women-owned subcontractors. Interviewees discussed whether prime contractors might discriminate against MBE/WBEs in their selection of subcontractors.

Some minority and female business owners indicated that prime contractors do discriminate against MBE/WBES in their selection of subcontractors. For example:

- The African American owner of a non-certified consulting firm said, "Oh, yes. Maybe [the prime contractors] have competitive pricing. Sometimes there are some other subtle reasons why prime contractors just bypass you, because maybe they don't feel comfortable dealing with a minority company. Sometimes [the prime contractors] just say blatantly that they don't want to work with a small company, minority company, black company, or Hispanic company. [They say it] blatantly!" [#4]
- The partner in a DBE-certified professional services firm wrote that prime consultants hold negative stereotypes toward DBEs, and that after using his company to win a contract they will resist giving any work to his firm, or paying for the work." [WT#9]

Some minority and female interviewees report that there may be discrimination but that prime contractors would not be blatant in any discrimination. Examples of such comments include the following:

■ When asked about being denied the opportunity to bid, the female Asian American principal of an Asian American-owned, MBE/DBE-certified engineering company said, "No, [that doesn't happen], because people are smarter than that. If primes don't want to work with you, there is always a reason other than race or gender — nothing blatant." She went on to say, "It's hard to know if [the firm] doesn't get on a prime [contractor's] team because of no relationship or because [it is] a minority or woman [owned firm]." [#1]

When asked about denial of the opportunity to bid being a problem, the African American owner of a DBE-certified specialty contracting company said, "Yes, that exists. But, [the DBEs] don't know exactly how [the prime contractors] are processing the bids. Companies who feel this way will ask for the bid, but [then not award the job to the DBE companies]." [#35]

Some business owners reported that they have been unfairly treated by prime contractors, but noted that it would be hard to know if it was due to discrimination. For example:

- The female owner of a DBE-certified specialty construction firm said, "There are a lot of jobs I think [my company] was more than qualified for, but [it] didn't get [the job]. But I'll never know why." [#27]
- The general manager of a woman-owned, DBE-certified specialty contracting company said that sometimes the company has to fight to keep a job that was awarded to it, because the prime contractor wants to cut out that scope for some reason. [#18]

Treatment by prime contractors and customers during performance of the work. Many business owners and managers discussed unfair treatment by a prime contractor or customer.

Some business owners indicated that unfair treatment during performance of work had affected their businesses. Examples of those comments include the following:

- The general manager of a woman-owned, DBE-certified specialty contracting company said that although unfair treatment is rare, there is "always going to be someone who tries to get [a company] to do something that's going to benefit them and not [our company]. [A company] just has to train [its] employees." [#18]
- When asked if treatment by the prime or customers during performance of the work is a barrier, the white male general manager of a general contracting company said, "Yes, I see changes in the project, and asking [the company] to do things that aren't in the contract. Also the inability to keep to the schedule." [#33]
- The female owner of a DBE-certified construction company said that her firm has had good experiences working with most prime contractors, but some prime contractors make it clear that they prefer not to work with minority- and women-owned businesses. "Most of [the prime contractors] have been good. If they have any ill feelings toward DBE contractors, I wouldn't say I've experienced any of that. But it's the small minority [of prime contractors] that don't even try to hide their disdain for the minority contractor or the DBE contractor, or in some cases it's been because I'm female." [#40]

Some business owners and managers, including owners of DBE-certified firms, said that demeaning behavior and other unfair treatment precluded working for certain prime contractors. For example:

■ The African American owner of an MBE/DBE-certified engineering company stated, "Yes, absolutely. There are certain prime contractors out there that [my firm] will not work with or try to work with. An example is when [my firm] was working out at the airport, and [it] had a great relationship with these folks, and a larger national firm did not [have a great

relationship]. So, this large firm wanted [my firm] on their team. [My firm] was involved in the proposal process and the interview. The interview was going poorly, and my answers to some questions helped the team win the bid. Afterwards, [my firm] got to design some standard drawings, and that's it. So, [it] was relegated to nothing after helping the [prime contractor] win the job." In referencing other instances, he said, "Sometimes it seems like [the prime contractor] is setting [my firm] up to fail." [#8]

- The white female owner of a DBE-certified specialty contracting company said, "[Mistreatment] by the prime contractor is so rare. There are two prime [contractors] that have treated [my company] badly, and [my company] doesn't do business with [either of those companies] anymore." [#12]
- When asked if treatment by the prime contractor is a barrier, the female owner of a DBE-certified specialty construction firm said, "Occasionally, I have difficulty getting some primes to create a relationship [of respect]. [My company] has had good prime [contractors] and bad ones." [#27]
- When asked if treatment by the prime or customer during performance of the work is a barrier, the white male owner of a specialty contracting company said, "Sometimes [my company] gets asked to do tasks that tear the machinery up. [It] will do it, but [it] won't work for that contractor again." [#20]

Some interviewees indicated that unfair treatment was connected with their race/ethnicity or gender. Examples of those comments included the following:

- The female Asian American principal of an Asian American-owned, MBE/DBE-certified engineering company said, "In the beginning, in 2004 2005, when the firm started, people were mean and questioned competency. Another factor for us, as Asians, [is that] we are of smaller stature than Caucasians. For [the firm's owner], I think it really hurts him. He is 5'3" and 110 pounds. It doesn't bother him, but, for a male, to be that small [in this society], is challenging. Sometimes he talks to customers on the phone, and then when they meet, the customer is surprised and reacts to his [stature and youthful appearance]. He gets remarks like, 'You look a lot younger that I thought you'd be.' [The firm] didn't get a lot of respect at first. But now it's better." [#1]
- When asked if treatment by prime contractors or customers during the performance of work is a barrier, the African American owner of a DBE-certified trucking and specialty contracting company said, "It has been a problem. On one project, the prime gave [my company] 110 change orders, but at the end of the job, the [prime contractor] failed to pay [my company]. [There are] quite a few major primes that broke a lot of local companies. The [subcontractor] does the work and the [prime contractor] wouldn't pay [the subcontractor]. Probably 80 percent of the companies broken were owned by people of color."

He went on to say that he thinks those situations are related to discrimination. He said, "I think of what my father and his peers went through – the history of discrimination in the construction industry in Washington State from then to now, I look at the utilization of race-specific firms and I see the same thing happening. What's happening now concerning discrimination looks the same as it did back then — non-inclusion of people of color." [#36]

Some owners and managers of MBE/WBEs reported that there were double standards for performance of work that adversely affected their companies. Some individuals attributed the double standards to discrimination:

- The female Asian American principal in an Asian American-owned, MBE/DBE-certified engineering company said, "When a firm is new, [it] has to prove [itself] and [it's] probably held to a higher standard. A minority or woman [owned firm] probably has to be even better. Sometimes a firm has to overcome the perception that the firm only got a job because of being minority or woman owned." [#1]
- The African American owner of a non-certified consulting firm said, "There could be [double standards in performance], yes. In terms of perception of personality and race, those things are always there. It takes a person of courage to challenge the process and bear the consequences of getting in trouble." He indicated that he has been in trouble a number of times. [#4]

Some minority and female business owners reported that they were held to higher standards, but did not attribute the cause to discrimination:

- The Hispanic American co-owner of a construction company said, "[Double standards in performance] happens a lot. The prime contractor will hold us to a certain level, and yet [the prime's] own crew will do mediocre work." [#26]
- The female manager of a woman-owned, DBE-certified construction company reported that her company seems to be held to a higher standard than its competitors, and that it occurs "on a lot of jobs." "[Our management] doesn't know why there seems to be this double standard." [#19]

Some interviewees did not think that treatment by prime contractors was a barrier for their firms. [for example, #23, #24, #29, #31, #5, #16, #21, #30]

Unfavorable work environment for minorities or women. The study team asked business owners if there was an unfavorable work environment for minorities or women, such as any harassment on jobsites. Some interviewees, including white men, said that there was. [For instance, Interviewee #33] Some business owners said that conditions have improved. [For example, Interviewee #11]

Some interviewees reported sexual harassment of women on worksites. Comments included:

■ The female owner of a DBE-certified construction company indicated that prime contractors are not necessarily welcoming of the idea of working with DBEs. "I think that there's a prevalent attitude out there that ... [DBEs are an inconvenience]. ... It's a love-hate thing. They want you. They need you. But, they really wish that they didn't have to deal with you." She added, "When you do butt heads with these general [contractors], it's like they want to push your buttons to make you quit ... so that they can ... put somebody else in there [that is not a DBE]."

She also described another scenario in which her foreman, who is also a woman, has difficult commanding respect from subordinates on the job site because of her gender. "I have ... observed, and corrected, [a situation] with my female foreman ... where she's on a

job and she's running the job. ... [Union workers on the job site] won't take her authority." [#40]

- A female representative of a majority-owned, non-certified specialty contracting business said, "Yes, this is sometimes an issue with our female flaggers, when they are in the field. ... As a flagger I experienced sexual harassment. Female flaggers frequently do. It's pretty widespread out there. I see discrimination everywhere out there." She said that this harassment is common from cars driving by, and from general contractor workers on the crew. "When you pull up to the job in the morning and you're the only woman, you get sexual comments. ... Female flaggers will come into the office, after being in the field, and tell me they were harassed all day." [#14]
- When asked if unfavorable work environment for minorities or women is a problem, the general manager of a woman-owned, DBE-certified specialty contracting company responded, "Yes, that was ongoing for a number of years. Part of it is that in our industry there was a concept that every flagger in the world was immoral. There were a lot of terrible remarks [made] to the female employees when I came here. ... One of the first orders of business, at the owner's insistence, was that we change that. It took a long time, but we have not had that problem [recently]. I literally went to a jobsite and talked to a guy who admitted that he referred to a female by her body parts and that it was just 'old school' and he didn't mean anything, so we removed all our people [from that job] and said, 'When you change your attitude [our people] will return.' The owner got involved. That was a huge problem up to five or six years ago. The prime contractors have done a tremendous job in correcting that also." [#18]
- The white female owner of a DBE-certified specialty contracting company said, "I know that happens. [The company] does not tolerate something like that. [The company] has an EEO policy here. We let [each employee] know that if something like this happens she needs to contact us [in the office] immediately. I've had inspectors removed from the job. I've had subcontractors removed from the job." [#12]

Some interviewees indicated that there was harassment of minorities on jobsites. For example:

- When asked if he had experienced discrimination on the job, the Hispanic American coowner of a construction company said that in the early days of the company there was. He said, "'Stupid Mexican' was a statement heard at times. ... We say we're not Mexican, and they say 'Whatever, you're brown skinned." [#26]
- The African American owner of an MBE/DBE-certified engineering company said, "Yes, I have heard comments. I've been working on construction projects for a lot of years, and I'm pretty thick-skinned. When I hear something I just check it. I say something like 'Hey, don't go there." [#8]
- The African American owner of a DBE-certified specialty contracting company said, "Some of my workers will complain about harassment on the jobsite and I've experienced it. It comes from the [prime's] supervisor. [The supervisor] will talk down to [subordinates]. [Some] supervisors treat [my employees] in a manner that doesn't respect the skills and

experience [my employees have] in the vehicle being operated." He said that this is a common problem and he thinks it is the result of racial discrimination. [#35]

Some interviewees said that they that had not seen experience unfavorable work environments. [For instance, Interviewees #9, #24, #30, #31] For example, the president of an engineering industry trade association indicated that he does not think that race- or gender-based discrimination affects any of the barriers that he identified in the local marketplace. He said, "I didn't even get a hint of that in asking that question [to the organization's members]. ... Nobody cares [about race or gender] anymore." [#38]

Approval of work by prime contractors and customers. Interviewees discussed whether approval of work by prime contractors or customers presented a barrier for businesses.

Some interviewees identify difficulty with approval of work by prime contractors or customers. For example:

- A minority female co-owner of a non-certified construction company said that approval by prime contractors can be an issue. For example, she said, "[Our company] did a job where the project manager wanted [our workers to do certain work] that wasn't part of the deal. It was an unforeseen condition. [Our company] did the job but didn't get paid for it. [That situation is] not usually a problem [and the job was] still profitable." [#28]
- The Hispanic American owner of a non-certified construction company said, "Normally with big jobs, over \$20,000, I carry paperwork where it says 'everything is okay', [the customer] signs and it's okay. I make [the customer] sign, right on the spot." [#29]
- The white female co-owner of a non-certified construction company said that approval of the work by the prime contractor or customer can be a barrier. She explained, "Getting through all the paperwork [can be a challenge]." [#31]
- The white female owner of a DBE-certified specialty contracting company said, "Yes, that can be a problem. I've always been told, 'WSDOT has to approve that.' Then I've been told by WSDOT that the prime [contractor] hasn't submitted the proper paperwork for that. I can't go to WSDOT and say 'Here's the proper paperwork,' because I did send it to the prime [contractor]. It just hasn't been sent on." [#12]
- In reference to approval of work by prime contractors or customers, representatives of a large publicly-owned concrete company said, "If that's a problem, it is usually because of our [company's] own error. [Other times], smaller agencies, or especially on private work, the project owner may have unrealistic expectations because it doesn't do this frequently, whereas the larger agencies understand [the realities of the project better and] know what to expect. ... [Our company] also runs into contract language that basically makes the prime contractor responsible for everything that the owner didn't think of and that isn't in the contract. The 'catch-all' phrase." [#15]

Some interviewees did not indicate that the approval of work by prime contractors or customers during performance of work is a barrier. [for example, #23, #24, #34, #5, #18, #8, #11, #16, #20, #21, #27, #30, #33, #35, #36]

G. Additional Information Regarding any Racial/ethnic or Gender-based Discrimination

Interviewees discussed additional potential areas of any racial/ethnic or gender-based discrimination, including:

- Stereotypical attitudes about minorities and women (or MBEs, WBEs, and DBEs) (page 98);
- "Good ol' boy" network or other closed networks (page 100); and
- Other allegations of discriminatory treatment (page 103).

Stereotypical attitudes about minorities and women (or MBE/WBE/DBEs). Several interviewees indicated that minorities, women, or MBE/WBE/DBEs are the subject of stereotypical attitudes. For example:

The female owner of a DBE-certified construction company indicated that DBEs are treated and thought of differently than other firms in the construction industry. Specifically, she cited examples where contractors didn't think she was in charge because she was a woman. She said, "There is definitely a difference — perception-wise — of DBEs in the general contractor community. ... I've had some things where I've had to fight for what's right ... where I have had to ... assert my position to protect my company. It's interesting, because there's a bit of a perception on the part of some of the contractors that I've worked with that they thought that I wasn't really in charge. ... I think they just thought I was the dumb blonde, and I surrounded myself with these smart guys to run the work." She indicated that she has encountered such attitudes from both competitors and prime contractors with which she was working.

She described a situation in which she was trying to resolve a scope dispute with a prime contractor. During a meeting to resolve the issues, she approached a representative from the prime contracting firm to shake his hand and he made what she interpreted as an offensive remark relating to her gender. "I go to the meeting ... and I [approach the individual who is running the company] ... and I've known this guy for 15 years. ... I reach out to shake the guy's hand ... and he doesn't take my hand. He just looks at me and goes, 'Oh, that's right. You're the one who used to carry [her ex-husband's] bids.'" [#40]

- The Hispanic American co-owner of a construction company reported stereotypical attitudes that affected his business. He referred to comments made such as "stupid Mexican" in his work. [#26]
- The female Asian American principal of an Asian American-owned, MBE/DBE-certified engineering company said, "[The firm's owner and I] have had experiences related to being Asian and of small size and with slight accent, especially the firm's owner. Now construction contractors love to work with him. Primes don't deny [an MBE firm] an opportunity, [but the prime contractor] just might give [majority or larger firms] more of an opportunity." [#1]
- A manager of a Native American-owned, DBE-certified engineering firm said, "We go to meetings and introduce our company as a DBE firm and there are almost little snickers coming from some attendees. There is discrimination against the DBE firms, damn it, and I'm not even a minority. I just like fairness." [#6]

- The African American owner of an MBE/DBE-certified engineering company stated, "I've been brought into interviews where I didn't know anything about the topic, [and I felt that I was brought in] because the [prime contractor] didn't have a lot folks of color [on the team]." He said that such situations have occurred several times, where he is present to be a black face, with no role whatsoever in the interview itself. He went on to say that DBE certification "does carry a bit of a stigma." [#8]
- When asked if stereotypical attitudes are a problem for her business, the white female CEO and co-owner of a WBE-certified construction company said, "Sometimes. It's been mild, but when I first started the business there were people who wouldn't talk to me, because I was a woman." [#11]
- When asked if stereotypical attitudes are a problem for the business, the general manager of a woman-owned, DBE-certified specialty contracting company responded, "Yes, there is the stigma attached to minority businesses, that because [the business is a certified company], it is not self-supporting or not a quality business." He continued to explain that the other stereotypical attitude the company's owner has fought many times is that, as a woman, she couldn't possibly be competent to run the business. [#18]
- The female majority owner of a non-certified specialty construction company said, "Yes, I get 'looked by' sometimes; it depends on who it is." [#30]
- The African American owner of a DBE-certified specialty contracting company said that stereotypical attitudes are a common problem, and he thinks it is the result of racial discrimination. "Sometimes I'll take a driver, a white guy, with me to the jobsite. I will talk to the job supervisor and the supervisor acknowledges the question from me and then [directs his answer] to the white guy [rather than to me]. This happens over and over." [#35]
- A partner in a DBE-certified professional services firm reported that his firm is affected by negative stereotypes concerning DBEs. "We find that very often we are thought of as second class citizens or subpar. The knowledge and skill that we have in the area of service required is discounted by the prime not because of reality but instead because of stereotypes and perceptions." He went on to indicate that primes that use his firm to win contracts may then resist giving his company any work on the contract. [WT#9]

Some interviewees indicated that negative stereotypes had to do with being a small business. For example:

- Concerning disadvantages of certification, a white female manager for an MBE/DBE/SBA certified engineering company said, "The only disadvantage [to being a certified firm] is that sometimes [it] is viewed as being a small firm until [it] has the capacity to do projects, whether that's true or not. People may have some thoughts about what a small business is and what a small business can do." [#9]
- The African American owner of a non-certified consulting firm said, "Yes, [stereotypical attitudes] are always there. [Primes contractors and public owners] always want small businesses to prove [over and over] that they can do things despite having the qualifications and documentation of past performance. [The prime contractors and public owners] want proof of ability to do work four or five times. This occurs with the prime contractors and public agency personnel. This is a very pervasive problem." [#4]

Some interviewees reported stereotypical attitudes, but that they did not have a negative effect. For example, when asked stereotypical attitudes existed on the part of customers and buyers, the Hispanic American owner of a non-certified construction company, said, "Yes, but not in a bad way." He went on, "People see me and say 'Hey! Hey!' and are very friendly. I don't have a problem ... yet." [#29]

Some interviewees reported no instances of stereotypical attitudes on the part of customers or buyers. [for example, #31, #9, #12, #16, #20, #27, #32]

"Good ol' boy" network or other closed networks. Many interviewees had comments concerning the existence of a "good ol' boy" network that affects business opportunities.

Those who reported the existence of a good ol' boy network included minority, female, and white male interviewees. For example:

- The female owner of a DBE-certified construction company indicated that a good ol' boy network operates in the local construction industry and makes it more difficult for DBEs to succeed: "[The good ol' boy network] happens in ... situations ... where people use their influence to limit competition or allow you to not have access to the same vendors or suppliers" [#40]
- The Hispanic American owner of a DBE-certified engineering firm said, "Absolutely, it's part of any industry. Anyone who doesn't see it there [is blind] it's there." [#7]
- The female co-owner of a majority-owned business said, "Yes, [the good ol' boy network] can be an issue." [#24]
- The white male owner of a small construction company said, "Yes, it's my perception that a lot of deals are made at the clubhouse, or during the campaigns for re-elections. I do recognize that. In the public sector, the large privately-owned contractors, that personal relationship goes farther than your [company's] ability, especially when all things are equal, and on paper [all the contractors] look pretty equal." [#22]
- The white male owner of a new construction company said, "Yes, I think it's alive and well." [#13]
- The white male representative of a woman-owned, non-certified construction company said, "I'm included in that good ol' boy network, so, yes, I do understand it and yes, it is there. It is the word-of-mouth. You get [your company] in that, everybody knows [it]. If [it] does good work, [it] will get into [the network]." [#34]
- The white male owner of a specialty contracting company reported that he sees the good ol' boy network in unethical connections between government agencies and huge contractors. He reported that it limits competition to a small set a contractors. [#25]

Some minority and female interviewees indicated that the good ol' boy network adversely affects their businesses. For example:

- The female Asian American principal of an Asian American-owned, MBE/DBE-certified engineering company said, "Oh, yeah, there is a good ol' boy network." She said that it is harder to get opportunity when you are an MBE/WBE. [#1]
- The African American owner of a non-certified consulting firm said, "Oh yeah, big time, big time. There might be some cultural differences where you go, what you do with your spare time. But in the good ol' boy network, if you belong to the same club, [go] golfing or climb some mountain together, then you're in their good book. [However], a lot of minority companies may just want to do [the] work and might not be tuned to other social things like golfing and mountain climbing. But even if you reach out to them and they don't want to do that with you, what can you do?" He said that the good ol' boy network exists in both the private and public sectors. [#4]
- The African American owner of an MBE/DBE-certified engineering company said, "Yes, it is there. [The firm] spends a lot of time marketing, and there's no reason why [it] shouldn't get the opportunity, but you know that [it] won't get the opportunity. I've seen it with companies, and then years later the environment changes, and [the firm] may get an opportunity." [#8]
- The female majority owner of a non-certified specialty construction company responded, "Yes. It may have been busted up a bit, but it is still out there. I think that [our company] gets shopped quite a bit because of our experience, and then the job is given to [a subcontractor] who is a friend [of the prime contractor or owner]." [#30]
- When asked if the good ol' boy network exists, the African American owner of a DBE-certified specialty contracting company said, "Yes, most definitely. That's where my [company's] job went to. The [prime contractor] let [my company] stay on [the job] until the DBE dollars were accomplished. The job was two and a half years [in duration. My company] stayed seven months. Then the good ol' boys got it. The [new company] is out there now." [#35]
- The general manager of a woman-owned, DBE-certified specialty contracting company explained, "For years there existed, what [the owner] calls the 'good ol' boys syndrome,' and a lot of that is really not based on discrimination, but has to do with doing business with people that are trusted. [However], some of it is discriminatory, and the [DBE] system has helped to break that down. ... It was extremely difficult. Without the DBE program, it wouldn't have happened. The [people who have been entrenched in the construction business] get too comfortable with who they know. I can tell you that the major objection of the good ol' boys in the big companies was that [the government] was telling [their companies that there must be usage of DBE companies on some projects]." [#18]
- When asked if the good ol' boy network exists, managers of a Native American-owned, DBE-certified engineering firm said that they see the public agencies, especially WSDOT, award contracts to the same companies over and over. [#6]
- The female owner of a DBE-certified specialty construction firm stated, "I'm sure [the network] is in existence." She said that she has tried to break in with certain prime

- contractors and then has been told by their staff that she is only be contacted by them to meet good faith efforts requirements. [#27]
- The Native American owner of a DBE-certified construction company wrote, "Over the years I have also struggled to break into the good ol' boy network that exists in the construction industry. Even after [many] years in business, there are some companies that [my company] submits sub-bids to that have never subcontracted with [my company], even when [my company's] pricing was lower than its competitors." [WT#5]
- A public hearing participant and owner of a DBE-certified construction company stated, "In the 36 years that I have been in business as a DBE contractor, I think our biggest problem, that every DBE contractor has, is the 'good ol' boy system,' as they call it. All your big general contractors already have their subs all lined up, and the people that they are going to work with, you just seem to be ... a problem to them." [VNP#3]
- The Hispanic American co-owner of a construction company said that the good ol' boy network was an issue. "Yes, when starting the business [the good ol' boy network was a problem], because [the company] didn't have the track record." [#26]
- The female manager of a woman-owned, DBE-certified construction company said that she remembered the good ol' boy network from years ago, but that it was not a problem today for her firm. [#19]
- The African American founder of a construction industry trade association indicated that unions discriminate against African Americans working in the local construction industry and prevent them from working. "The unions are our main problem here. It's the unions. They get blacks into their halls and they take their money, but they don't give them jobs. They skip over them they don't send them out to work. That's why you don't see any black faces on these construction sites."
 - One of the interviewee's colleagues who joined him for the interview added: "There is a prime current example of that going on with Sound Transit right now. There are six Title VI complaints that are being investigated right now. Sound Transit did a thorough investigation ... and they determined that both the prime contractor and the union had conspired to keep minority specifically black workers off the project."

Some minority and female business owners and managers said that there was a good ol' boy network, but they have, over time, been able to enter the group or form their own groups. For example:

- A white female manager for an MBE/DBE/SBA-certified engineering company said, "Yes, [the good ol' boy network] exists in [the] industry. But on the flip side there are small businesses and cultures that network together too. There's definitely still some of [the closed networks] out there." [#9]
- The white female CEO and co-owner of a WBE-certified construction company said, "There's always going to be good ol' boys. You just try to position [your company] so that [it] gets in with the group. You position your [company] so that [it] can start working with those people. I started years ago." [#11]

■ The white female owner of a DBE-certified specialty contracting company said, "Oh yes, [the good ol' boy network exists]. It's not a problem, though. It's a positive. I'm one of the 'good ol' boys' [myself]!" She went on to explain that a family member was very well known in the construction community. [#12]

Some interviewees reported they were not affected by any good ol' boy network or other closed networks or that the good ol' boy network no longer exists. For example:

- The Native American co-owner of a construction company said, "No, I don't [think that the good ol' boy network exists]. I think it's very open." [#16]
- The female manager of a Native American-owned, DBE-certified construction company said, "Because of the fact that [our company] had a history of 30 years in business here prior to becoming a certified minority firm, [the good ol' boy network] has not had an [adverse] effect on [it]." [#32]
- The president of an engineering industry trade association indicated that he was aware of the existence of a good ol' boy network "way back when," but that it does not exist anymore. He said, "This industry was a good ol' boy network 20 or 25 years ago. It isn't anymore you just can't operate on that basis. That is the old way of doing things, and it just doesn't exist anymore. ... There are firms that have trouble breaking in [to the industry], but ... [it's because of a lack of relationships and resources. ... I think you measure [success of small business and MBE/WBE programs] on [whether there] is an opportunity there not [whether there] is an equal outcome." [#38]

Other allegations of discriminatory treatment. The study team also examined other comments about discriminatory treatment.

Some interviewees had other comments about what they perceived as discrimination against minorities or women. For example:

- The Native American owner of a DBE-certified construction company indicated that he has "worked hard to make [his company] a successful business. To do so, I have been required to overcome and am still working to overcome many obstacles, including the discrimination that has resulted from the fact that I am a minority contractor. Much of the discrimination and poor treatment I have experienced is hard to document or to tie directly to my heritage, but I am certain that it is." [WT#5]
- The African American founder of a construction industry trade association reported, "In 1965, [African American-owned businesses] got more work than [African American-owned businesses are] getting in 2012." [#39]

H. Insights Regarding Neutral Measures

The study team asked business owners and managers about their views of potential race- and gender- neutral measures that might help all small businesses, or all businesses, obtain work in the transportation contracting industry. Interviewees discussed various types of potential measures and, in many cases, made recommendations for specific programs and program topics. The following pages of this Appendix review comments pertaining to:

- Technical assistance and support services (page 105);
- On-the-job training programs (page 106);
- Mentor-protégé relationships (page 106);
- Joint venture relationships (page 108);
- Financing assistance (page 109);
- Bonding assistance (page 111);
- Assistance in obtaining business insurance (page 112);
- Assistance in using emerging technology (page 112);
- Other small business start-up assistance (page 113);
- Information on public agency contracting procedures and bidding opportunities (page 115);
- On-line registration with a public agency as a potential bidder (page 116);
- Hard copy or electronic directory of potential subcontractors (page 117);
- Pre-bid conferences where subcontractors can meet prime contractors (page 117);
- Distribution of lists of planholders or other lists of possible prime bidders to potential subcontractors (*page 119*);
- Other agency outreach such as vendor fairs and events (page 119);
- Streamlining or simplification of bidding procedures (*page 121*);
- Breaking up large contracts into smaller pieces (page 122);
- Price or evaluation preferences for small businesses (*page 123*);
- Small business set-asides (page 124);
- Mandatory subcontracting minimums (page 125);
- Small business subcontracting goals (page 126);
- Formal complaint and grievance procedures (page 127); and
- Other measures (page 129).

Technical assistance and support services. The study team discussed different types of technical assistance and other business support programs.

Some business owners and managers thought technical assistance and support services would be helpful. Business owners and managers in support of such programs included #22, #24, #4, #5, #11, #12, #13, #16, #19, #20, #25, #30, #31, #33, #35 and #36.

Some business owners and managers reported being aware of technical assistance and support services programs and having used them. Examples of such comments include the following:

- The female owner of a DBE-certified specialty contracting firm said that when she started her business she went to the William Factory Small Business Incubator program for the assistance that they provide. [#27]
- The Hispanic American owner of a DBE-certified engineering company was supportive of technical assistance services. He said, "Probably the two best programs we have in the state right now for support of small businesses are the Business Economic Development Committee at the University of Washington and the PTAC program, the Procurement Technical Assistance Centers. PTAC is basically ... you can find them in any of the economic development offices. "[Those agencies] teach [participants] infrastructure [and give the participants] an education ... on how to create some kind of foundation for your company. That's what their job is to help you do that." [#7]

Some interviewees recommended specific technical assistance topics. For example:

- The African American owner of a DBE-certified engineering company said, "There's a lot of firms that are good at doing what they do in the field, but not necessarily good at the office work." [#8]
- Although she said that the firm where she works did not need these services, a manager of a large DBE-certified engineering company said, "I think services could be beneficial to start-up businesses, especially regulations that govern how overhead is calculated. It would also be beneficial to a start-up business to know how to find out about jobs, how to put proposals together, where to meet prime [contractors], and so on." [#9]
- The white male owner of a construction company said that "marketing help would be fantastic." [#34]
- The female manager of a Native American-owned, DBE-certified construction company said "I know about technical assistance programs and that some firms have used them. The services we used when [our company] first signed up were substandard. The people putting on the training classes were substandard. We were encouraged to use the programs but there wasn't a lot of follow through. These were services promoted by WSDOT and OMWBE. It is harder to get in contact with the WSDOT today than it was five or seven years ago."

 [#32]
- A discussion participant representing a diversity program office said, "For me, the big issue is making sure we have support for technical assistance. ... I hate to see when they [DBEs] stumble and fall and there is nowhere for them to go, ... they do everything themselves as a

small business person and there might be one thing about their business that they don't really understand so ... we partner with the University, with their law school and their business program, to get some of our firms through their program that they've got around business development." [DBEP#5]

Some firm owners and managers recommended against such programs because they thought that small businesses should access any assistance on their own. For example:

- When asked if technical assistance would be helpful, the Subcontinent Asian American male owner of a certified engineering firm said, "I don't think [efforts to increase technical assistance and support services] should be done. To me the business should have that understanding, that capability on its own." [#10]
- The co-owner of a concrete company made a similar observation. "It would certainly [be helpful], but I don't feel that the government needs to provide it. I think [a company] ought to be able to take care of itself." [#17]

Some business owners and managers said that generalized technical assistance would help firms, but others said that it could actually be harmful. For example:

- A female principal of an Asian American-owned, DBE-certified engineering firm said, "Technical assistance is only helpful for brand new firms. We went through some training sessions, small business seminars, and presentation sessions put on by non-profits but did not find them helpful because they don't have any new information." [#1]
- The Pacific Islander owner of a DBE-certified engineering firm cautioned against providing technical assistance: "Not a good idea, depending on the trade. If the assistance doesn't know the trade, [it] can take [the business] in the wrong direction." [#37]
- The general manager of a woman-owned specialty contractor cautioned, "Yes, it could be [helpful], if done correctly. I can't imagine how [the agencies] could do it correctly." [#18]

On-the-job training programs. Nearly all business owners and managers interviewed were supportive of on-the-job training programs, but most limited their comments to apprenticeship programs. However, one white male owner of a small specialty construction firm said, "That might help even me as an employer." [#20]

Mentor-protégé relationships. Many interviewees commented on mentor-protégé programs. A number of business owners said that they had informal mentor relationships.

There were many comments from interviewees in support of mentor-protégé programs. [for example, #22, #34, #2, #4, #9, #11, #13, #14, #15, #16, #17, #18, #27, #30] Examples of those comments include the following:

- The Subcontinent Asian American male owner of a certified engineering firm said, "The mentor-protégé thing of having somebody who has larger exposure and experience would be definitely beneficial." [#10]
- The female manager of a woman-owned, DBE-certified construction company said, "Yes, [mentor-protégé programs are helpful]. There are some prime contractors that I'm pretty

- close with that help me out with paperwork or problems. It would be nice to have [a relationship with a business] with some of that kind of experience." [#19]
- The general manager of a majority-owned construction company supported mentor-protégé programs: "[The company] has been both the mentor and the protégé [at different times], a long time ago. It's a great way to pass on knowledge." [#33]
- The Pacific Islander owner of a DBE-certified engineering and specialty construction company related how his company has grown in recent years, "For several years the firm struggled. The mentor-protégé relationships have helped [the firm] grow from a \$1 million company to a \$5 million company last year." [#37]
- The African American owner of a DBE-certified engineering company reported a favorable mentor-protégé experience. [#8]
- The female co-owner of a non-certified construction company said, "The mentor-protégé concept sounds like a fantastic idea." [#24]

Other business owners and managers had criticisms of mentor-protégé programs. For example:

- The Asian-Pacific American owner of a DBE-certified engineering firm said, "I have tried to [involve my company in] mentoring but never found a long-term mentor. I [have] found short-term mentors but once the mentor fulfilled whatever requirement it had, that was pretty much the end. For me, unless [my firm] could get paid, I think it's a waste of time. It would be like getting a third party to learn something [that could be learned] on the Internet." [#3]
- The white male owner of a surveying company said "[My firm] has done that, and I have nothing to say against that. [But] more often than not [it is] a big fish and a little fish. The big fish is going to need that little fish only because [it] can't find enough people [it]self. [My firm] has, from time to time, even on small jobs, used one or another of the other firms. Obviously [my firm] doesn't want to do it too much, because [it] needs the profit too. [The firm] has never had a bad experience doing it, though." [#5]
- The female owner of a DBE-certified specialty contracting company had a negative opinion of mentor-protégé programs. "I've heard about those. I think it's setting up a 'front' company. I knew the mentor-protégé program when it first came out, and I know a lot of [those companies] failed because the protégé was actually a pawn of the mentor, and the mentor was actually handling all of the work." [#12]
- The African American owner of a DBE-certified specialty contracting company said, "Some of the larger companies have [mentor-protégé programs], but it is window dressing. It really doesn't do anything." [#35]
- The African American owner of a DBE-certified trucking and specialty contracting company said, "[A mentor-protégé relationship] is very dangerous between subs and prime [contractors]. There are a lot of problems with control as to who's doing the work. It would be helpful under strict supervision." [#36]
- The Pacific Islander owner of a DBE-certified engineering firm had participated in mentor-protégé programs. "[My firm] is in one now and was in one before. These can be good if

there are good understandings between the mentor and protégé about what to do. The first one [my firm] had under the 8(a) program did not work out and after 2 years I let it go. The one [my firm] is in now is working out better, but there are still flaws." [#37]

Joint venture relationships. Interviewees also discussed joint venture relationships.

Some of the business owners and managers interviewed had favorable comments about joint venture programs. [for example, #11, #12, #13, #16, #17, #19] Examples of those comments include the following:

- The Subcontinent Asian American male owner of a certified engineering firm said, "I have seen some instances where a couple small businesses will get together and propose a joint venture for some project. An ability to do that I think is great." [#10]
- The Hispanic American co-owner of a construction business said that he had done joint ventures a few times, that they had gone very well, and was supportive of this opportunity. [#26]
- The Asian-Pacific American owner of a DBE-certified engineering firm said, "I love joint venture relationships. Joint venture relationships would allow [my firm] to deal directly with the owner or agency. [My firm] has not been in a joint venture relationship before." [#3]
- The white male owner of a construction company said, "Yes, [joint venture programs are helpful]. I have sought out joint ventures for projects that my company does not have all of the expertise or certifications necessary to complete those services." [#22]
- The female co-owner of a construction company reported, "Yes, [our company participates in joint ventures] often and it works well." [#31]
- The African American owner of a DBE-certified engineering company indicated support for a joint-venture program. He said that his company "often tries to work with other companies to build capacity but hasn't done a formal joint venture." [#8]
- The general manager of a majority-owned construction company said that joint-ventures have worked well for his company and supported providing that assistance. [#33]
- The white male owner of a construction materials supply company was supportive of joint venture programs "because you can pool two [company's] equipment and go do a project that might be tough to handle [by one company]." [#2]

Some interviewees expressed negative comments and anecdotes about joint venture programs. For example:

- The female co-owner of a non-certified construction company said, "[Our company] was involved in a joint venture once and prefers not to do it again." [#24]
- A female principal of an Asian American-owned, DBE-certified engineering firm said, "I think it's a little over [the head of the small business owner]. I don't think it even makes sense." [#1]
- Representatives of a large majority-owned concrete company cautioned that legal issues can limit opportunities for joint venture agreements. [#15]

- The African American owner of a DBE-certified trucking and specialty contracting company said, "I know about [joint venture programs]. I can't think of any prime [contractor] that has ever joint ventured with a DBE. I've never heard of two DBEs joint venturing. It's different with the trucking industry. WSDOT needs to give the prime [contractor] an incentive to joint venture with DBEs." [#36]
- When discussing joint venture relationships, the Pacific Islander owner of a DBE-certified engineering firm said, "Same problem as the mentor/protégé program. [My firm] has been in some joint ventures and it is hard to make it work." [#37]

Financing assistance. Many business owners and managers had comments about assistance obtaining business financing.

Many business owners and managers indicated that financing assistance would be helpful. [for example, #22, #23, #24, #11, #200423, #13, #15, #16, #18, #19, #20, #21, #30, #33] Comments in favor of financing assistance programs included the following:

- The Subcontinent Asian American male owner of a certified engineering firm said that he had some knowledge of a WSDOT program that lowers interest rates on loans for firms working on their projects. He commented, "I think it's a great endeavor. It helps to make businesses a little more financially viable." [#10]
- The African American owner of a DBE-certified trucking and specialty contracting company said, "I know of programs that are out there. It's a huge challenge, a huge barrier, for start-ups to get money and to meet the underwriting criteria. This is what keeps 90 percent of the DBEs down." [#36]
- The co-owner of a concrete company said loan guarantees would "certainly be helpful. Any time you can make getting through the financing process easier [would be helpful]. It's been quite a learning experience for me." [#17]
- The white male owner of an SBA-certified construction company said, "Sure. [Programs for financing assistance would be helpful for small businesses]. I've had lines of credit. Before all the turmoil in the economy, it wasn't too hard to get lines of credit. Now, it's not so easy." [#25]
- The African American owner of a DBE-certified engineering company supported the idea of financing assistance. "Yes, it's absolutely crucial. I wouldn't be in business today if it wasn't for [my lending company]." [#8]
- The African American owner of a non-certified consulting firm said that financing is such a huge issue, especially now with the economic downturn, that any financing assistance would be helpful. He said, "Banks are very reluctant. They think [that small business] is [a] big risk for them, even though we may demonstrate to them what we are capable of doing." [#4]

Some business owners urged WSDOT to consider up-front payments to small businesses working as prime contractors or consultants. For example:

The Asian-Pacific American owner of an engineering company said, "If WSDOT had a contract for \$500,000 and asked if [my firm] could staff the job, that's asking [the firm] to finance ten people for 30 to 60 days until [the first invoice gets paid]. [My firm] might not have financing to do that. My suggestion would be that if WSDOT thinks [my firm is] qualified and wants [it] to do the job, WSDOT should provide an upfront payment of something like ten percent of the contract amount as a form of mobilization. That amount would allow [my firm] to pay staff to do work. That would help the agency and also help small firms to grow."

He went on to say, "My question to WSDOT is — if [the goal is for] small firms to grow, does WSDOT want firms to grow incrementally or will WSDOT essentially restrict firms from going for larger contracts because of upfront costs? Larger firms have the financial means and capability to hire people and finance the project. [My firm] is capable of handling the project and managing it if [it] had the additional people. I have seen this approach work in the private sector where a contractor gets 5 percent at the beginning of a contract." He said that this practice is typical for contractors in the private sector. He would like to see a start-up money or mobilization approach used for WSDOT design consultants. "It costs money to get mobilized," he said. [#3]

Some business owners and managers had attempted to use or were aware of financing assistance programs and had negative comments. For example:

- The female owner of a DBE-certified specialty contracting firm said that her company had sought financing assistance through a WSDOT program but was turned down. She said, "Just because [her firm] owes money like every other firm, why can't [her firm] qualify for financing? My company is viable, has had some good years revenue-wise. I'm discouraged [because] it is so hard to find financing assistance." [#27]
- The white male owner of a construction materials supply company said he knows about SBA programs, including from his time making loans in banking. He said, "I see a paperwork barrier because it takes too long to line up financing in order to bid a project. By the time [a company] gets all the paperwork and stuff completed, the job has been bid and completed. Everything takes so long. No one wants to make a decision and move with it." [#2]
- The female manager of a Native American-owned, DBE-certified construction company said, "Our [company's] bank cut off [its] line of credit in November of last year and that put [the company] out on [its] own. OMWBE said there are financial assistance programs but so far, I have only heard that things are being looked into and there has been nothing helpful so far. When a small business needs help, [it] needs help [now]. It is devastating to [our business]." She went on to say, "I have actually gone to the [Federal] Department of Commerce. [That agency] has a program called 'Craft Three,' and [it is] looking at [our company]. You would think that the Federal Department of Transportation would be in the frontrunner of helping small businesses, especially the DBE businesses, [but that hasn't been my experience]." [#32]
- The African American owner of a DBE-certified specialty contracting company said, "It's a problem because the average small business can't qualify for the loan." [#35]

■ The Pacific Islander owner of a DBE-certified engineering firm said, "[My firm] has tried to use [financing programs] but never got it because [it's] too small. [It] couldn't [satisfy] the underwriting criteria." [#37]

Some business owners reported that their companies did not need financing assistance. For example:

- The white male owner of a surveying firm said, "There again, [my firm] has never had trouble [getting financing]. When I started the business I took my business plan to the bank and basically they said, 'No.' The reason is because [the banker] said, 'You're going to starve in six months.' So [he and I worked together to] double the amount of the loan so I could live on it and it worked perfectly. By the time the loan was paid off [my firm] was self-supporting. There are all kinds of leasing options and whatnot [these days], [so I don't see this as a barrier]." [#5]
- The female co-owner of a construction company said that her company does not need financing assistance. [#31]

Bonding assistance. The study team asked business owners and managers about bonding assistance.

Many business owners and managers indicated that bonding assistance would be helpful. [for example, #8, #11, #13, #15, #20, #30, #33, #22, #23, #24, #17, #19] Examples of such comments include the following:

- The African American owner of a DBE-certified specialty contracting company supporting bonding assistance. "It's a good idea, because most of the DBEs can't get bonding." [#35]
- The female owner of a DBE-certified specialty contracting firm said, "If there is an agency that's willing to waive the bond requirement, [my company] might make money on public contracts. But, bonds are required." [#27]
- The white male owner of an SBA-certified small construction company said that bonding can be tough to get for businesses that are not established. He was supportive of bonding assistance but also said that his company now does not have difficulty obtaining bonds. [#21]
- When asked about bonding assistance, the Subcontinent Asian American male owner of a certified engineering firm said, "I would think [bonding assistance] would be a good thing to help out." [#10]
- The female manager of a Native American-owned, DBE-certified construction company said, "Bonding is usually through each company's insurance agency. Only occasionally does a prime contractor require bonds from [our company]. I heard WSDOT would reimburse DBEs for the cost of bonding but [the contractor] has to qualify for a bond first. Financial institutions don't consider work on the books to be an asset and don't [really] look at receivables anymore." [#32]
- The African American owner of a DBE-certified engineering company was supportive of bonding assistance. He explained, "A lot of times the bonds are being held on pieces of work

- that have been completed, for a very long time. The [small companies] don't have a lot of bonding capacity so the large companies are basically putting them out of business." [#8]
- The Pacific Islander owner of a DBE-certified engineering firm, which also performs construction, said "[My firm] has applied and hasn't been able to get [bonding]. [It] couldn't meet the underwriting criteria." [#37]

Some business owners said that they did not have difficulties dealing with bonding. For example:

- The Native American co-owner and manager of an uncertified general contracting company said that other companies would need bonding assistance. He reported that he uses a good bonding company. "In [my company's] case, it's very affordable and relatively easy to get." [#16]
- The African American owner of a DBE-certified trucking and specialty contracting company said, "What [my company] does doesn't require bonding. But, I know of other DBEs who are intertwined with prime [contractors] and get around the bonding issue." [#36]

Assistance in obtaining business insurance. Some business owners and managers interviewed said that assistance obtaining business insurance was a need; others did not.

Some business owners and managers recommended assistance in obtaining business insurance. [for example, #4, #15, #16, #18, #33, #35, #36, #37] For example, the female manager of a woman-owned, DBE-certified construction company said that assistance in obtaining business insurance would be helpful. "Yes, if [the assistance] could get [our company's] premium down. Holy cow! [The insurance companies] are the ones making all the money now." [#19]

Many interviewees indicated that assistance in obtaining business insurance was not needed.

[for example, #24, #31, #34, #5, #13, #20, #25, #25, #30] A number of other business owners indicated that business insurance was readily available, even when they started their companies. For example, amanager of a large DBE-certified engineering firm said, "Our industry professional organization has been very helpful in offering insurance programs, sort of as a broker with the insurance provided by insurance companies." She also said, "I'm aware that the State Legislature just passed a law about indemnification in contracts. I haven't seen exactly what the new law will do but I think the change will make things more insurable. This could benefit the entire industry but especially small businesses." [#9]

Assistance in using emerging technology. Interviewees discussed assistance in the emerging technology.

Many business owners said that assistance using emerging technology would be helpful. [for example, #24, #26, #34, #8, #11, #15, #16, #18, #20, #30, #35, #37] Examples of those comments include the following:

■ The African American owner of a DBE-certified trucking and specialty contracting company said, "That would be phenomenal." [#36]

- The co-owner of a concrete company said, "[Assistance with emerging technology] would be wonderful. [My company] fought [its] way through it ... started with a fax machine. That was pretty much it." [#17]
- When talking about emerging technology, the general manager of a majority-owned construction company said that "it's kind of changed the game for us." He was supportive of assistance in using emerging technology. [#33]
- A manager of a majority-owned construction materials manufacturer said, "Yes [assistance with emerging technology would be helpful]. If you're in business, this is a need." [#23]
- The female owner of a woman-owned, DBE-certified construction company said that assistance with electronic bidding would be helpful. [#19] The white male owner of a construction company had similar comments. [#22]
- A manager of a large DBE-certified engineering firm said that assistance in using social media would be helpful. [#9]

One interviewee had accessed available training and was critical of the service. The female manager of a Native American-owned, DBE-certified construction company said, "At the very beginning [our company] had some people come in [from the State] and we knew more than [the trainers] did. WSDOT has helped by paying for a subscription to the Daily Journal of Commerce (DJC) plan center and allowing DBEs to use the subscriptions. That has helped [our company] immensely. [It] still has to pay for a [local] plan center but I'm not sure WSDOT will help pay for that too. It would be nice if all the plan centers in the state were accessible to DBEs without charge." [#32]

Other small business start-up assistance. When asked about other small business start-up assistance, many businesses were in favor of such assistance and often identified specific needs or approaches.

Some business owners and managers specifically mentioned marketing assistance. For example:

- When asked about any other start-up assistance, the Hispanic American co-owner of a construction company indicated that some kind of network would have been helpful to market his company. [#26]
- The female owner of a construction company said, "Marketing help is what [our company] needs most, especially finding smaller jobs." [#30]
- A manager of a majority-owned construction materials manufacturer stated that her company sees a need for tools to search for contract opportunities more easily. [#23]
- The female co-owner of a construction company said that business formation advice and coaching would be beneficial. [#31] The African American owner of a consulting firm said, "Start-up assistance would be good. There should be help as far as putting marketing plans together, outreach, learning about joint ventures, etc." [#4]

Other business owners and managers said that assistance with regulations and paperwork was needed for start-ups. For example:

- The female manager of a woman-owned, DBE-certified construction company said, "A lot of [the difficulty] is the paperwork ... knowing what paperwork you have to submit." She was very supportive of potential start-up assistance in that area. [#19]
- The general manager of a majority-owned construction company recommended training concerning proper billing and other paperwork such as certified payroll. [#33]
- The Native American owner of a construction company said that some of the biggest obstacles that his company faces are with WSDOT truck certification. "[The company] has to make sure our log book is properly done, that the maintenance is properly done, making sure the truck testing program is properly enforced. It's a painstaking, complicated process. [The company] feels like [it] is out here on an island trying to figure it out for [it]self." [#16]

Some business owners and managers recommended broader assistance such as business planning. For example:

- When asked about business start-up assistance, the white male owner of a construction company said, "Yes, putting together a business model plan, formation, everything [a company] needs to develop a small business [business] model, goals, etc."
- The general manager of a woman-owned specialty contractor recommended providing comprehensive assistance to new businesses that covered all of the topics in the in-depth interview. [#18]

In response to the question concerning start-up assistance, some business owners pointed to services that are now offered. For example:

- The African American owner of a DBE-certified trucking and specialty contracting company recommended that new companies go through the SBA for start-up assistance. [#36]
- The Hispanic American owner of a DBE-certified engineering company said, Washington CASH can provide start-up assistance. He said the SBA provides assistance as well and that the local office does a great job. [#7]
- The female owner of a DBE-certified specialty contracting company said that industry associations and agency outreach were helpful to her. "[I needed help] breaking into the 'good ol' boy' thing, like we talked about earlier. The biggest thing I did was [to sign the company up as a member of] the trade organization, the AGC (Association of General Contractors). I attended all the meetings and talked to everybody. I also went to WSDOT and introduced myself [as well as] went to all of the pre-construction meetings and met everyone." [#12]
- The female owner of a DBE-certified specialty contracting firm said, "Small business incubators are really a good thing. The [incubator] is able to take a building and spread the costs out by having a number of start-up businesses in the building. All the costs of operating a business, such as phones, electricity, and so on are shared. Banks, contractors and unions come to the incubator to provide information." [#27]

However, some business owners expressed some cautions about business assistance. For example:

- The female co-owner of a construction business cautioned, "It all goes back to the skill level of the owner. If the person is not willing to do certain things, to get out there, get the business going, meet people, then the business will fail. It doesn't matter who [is providing help]." [#11]
- The Pacific Islander owner of a DBE-certified engineering firm said, "There are a lot of businesses that want to start up that aren't qualified. There should be a screening process to help businesses that are qualified and really want to do it. Particularly needed is help getting working capital." [#37]

Information on public agency contracting procedures and bidding opportunities.Most interviewees indicated that more information on public agency contracting procedures and bidding opportunities would be helpful.

Many business owners and managers reported that they were already receiving information on bidding opportunities or knew how to search for them. For example:

- The co-owner of a concrete company indicated that information on public agency contracting procedures and bidding opportunities was already available. "If you want to look for it ... it's there." [#17]
- The general manager of a woman-owned specialty contractor had a similar comment, "That's all done pretty well now." [#18]
- The African American owner of a DBE-certified trucking and specialty contracting company said that this assistance is needed, but "a lot of us are seasoned [and know what to do]." [#36]

A number of interviewees suggested that public agencies better coordinate how they provide information about contract opportunities. For example:

- The African American owner of a DBE-certified specialty contracting company recommended putting all public agency bidding information "in one spot." [#35]
- The African American owner of a DBE-certified engineering company said that more information on public agency contracting procedures and bidding opportunities would be helpful. "Yes, absolutely. Every agency is a different situation. [It is a challenge] to learn how [each one] works. [In] some areas [my firm] just doesn't have the experience, especially for federal work. [Seattle Public Utilities] has forums on how to do business with the agency, which are great. [It would be helpful if other agencies followed suit]." [#8]
- The female manager of a Native American-owned, DBE-certified construction company made a similar comment. "It's not easy finding out about what's being bid [out] by some local agencies because [some] are not on the Internet. I think all local agencies should be required to be on the Internet." [#32]
- The African American owner of a consulting firm said that information about public agency bidding and contracting should be placed on websites and the Internet. [#4]

One interviewee cautioned that obtaining information when public agencies publicly announce bidding opportunities may not be helpful because it is then too late in the process.

For example, the Subcontinent Asian American male owner of a certified engineering firm said, "With projects that are out there, when they actually get advertised, a lot of these big companies know about this ahead of time and have already built their team so that when it's actually advertised, it's actually too late for smaller firms to be able to go through and get on board." He further explained that the larger firms talk with the big public owners and get word of projects coming down the pipeline. He said, "So like with Sound Transit, we get that a lot, where people will be calling up, 'Oh yeah, in one or two months this project is going to be coming down the line and we want you to be on the team." He went on, "Luckily for us we are in good position that we get some of those calls, but I feel sorry for some of the other firms that are out there, that don't have that kind of working relationship." [#10]

One interviewee indicated a need for two-way information about bidding opportunities. The female co-owner of a construction company said, "What is needed is a way to ask questions [concerning the project]." [#31]

On-line registration with a public agency as a potential bidder. Most owners and managers of construction companies said that online registration with public agencies would be helpful.

A number of interviewees said their companies were already participating in on-line bidder registration systems. For example, the general manager of a woman-owned specialty contractor said that agencies were already doing online registration of potential bidders, and that the system works well now. [#18]

Related to online registration, some business owners and managers discussed their experience concerning electronic rosters for small public agency projects. For example:

- When asked whether public agencies should offer on-line registration for potential bidders, the female co-owner of a non-certified construction company replied, "Yes, we do register on small works rosters." [#24]
- The white male co-owner of a concrete construction company spoke about small works rosters. He said that they are good for small general contractors, but that the jobs that come up do not fit his company very well. His firm primarily works as a subcontractor. [#17]
- The female owner of a DBE-certified specialty contracting company said that online registration had not been helpful for her firm. "[The company] signs up for the small works rosters. I don't think [the company] ever received ... one call [from those lists]." [#12]
- The African American owner of a DBE-certified specialty contracting company reported, "[My company] was on the City of Seattle's small works roster, but [that roster] has been eliminated because it didn't work. I don't think [the rosters] work, so I don't care about that anymore." [#35]

Several interviewees said they preferred centralized on-line registration systems for public projects. For example:

- A manager of a majority-owned construction materials manufacturer said, "Yes, it would be nice to have one centralized roster for all public agencies." [#23]
- The female owner of a DBE-certified specialty contracting firm said, "I think some agencies do [use on-line registration systems]. Generally, projects can be found on-line and then [the searcher] is directed to the Daily Journal of Commerce and Business Exchange Washington. Otherwise, many, many web sites would have to be searched to find the jobs." [#27]

Hard copy or electronic directory of potential subcontractors. Most interviewees said that hard copy or electronic lists of potential subcontractors would be helpful.

Some business owners pointed out existing resources, including WSDOT's on-line directory. Examples of such comments included the following:

- The African American owner of a DBE-certified specialty contracting company said, "[Directory of subcontractors] already exists. It puts [my company] in front of the prime." [#35]
- The general manager of a woman-owned, DBE-certified specialty contractor said that a DBE list exists now through WSDOT. [#18]
- The African American owner of a DBE-certified engineering company said, "[My firm] uses directories to look for other small firms, and I think larger firms do that as well." [#8]
- The general manager of a majority-owned construction company said that his company uses the OMWBE directory. [#33]
- When asked if a directory of potential subcontractors would be helpful, the female owner of a DBE-certified specialty contracting said, "I think there are quite a few of those out there. WSDOT has a good website although [the information] is way out of date." [#27]

One business owner strongly recommended electronic directories: "The electronic directory is the way to go." [#37]

Pre-bid conferences where subs can meet primes. Many business owners and managers supported holding pre-bid conferences. [for example, #31, #34, #5, #8, #11, #12, #13, #20, #37]

For example:

- The general manager of a majority-owned construction company said that his firm goes to pre-bid conferences and can identify subs at these meetings. [#33]
- The a Subcontinent Asian American male owner of a certified engineering firm said that he feels strongly that pre-bid conferences are vitally important. "I think that some kind of meeting or pre-proposal thing that allows different primes and subs to come together and see who can share projects that's the biggest thing that helps bring partnerships together." He went on, "That, and having some kind of participation requirements for small firms ... on contracts from public agencies that don't always require that." [#10]

- The white male owner of a construction company said, "Yes, [pre-bid conferences are helpful]. That's how [your company should] go about relationship building." [#22]
- The Hispanic American owner of a DBE-certified engineering company said, "[Pre-bid conferences] are good because you get to meet the prime [contractors] ... and have face time." [#7]
- The African American owner of a DBE-certified trucking and specialty contracting company made a similar comment. "Round table meetings [are good]. Face-to-face is super important." [#36]
- A manager of a large DBE-certified engineering firm reported that pre-proposal conferences are helpful. "You get to meet the client and the prime [contractors], as well as other firms that are there. It's good to know who your [company] might team with and who is [the] competition." [#9]

Some business owners and managers said that they did not have time to attend the meetings or that the meetings needed better scheduling. For example:

- Representatives of a large majority-owned concrete company said, "Yes, [pre-bid conferences are helpful]. It sounds good in theory, but we don't have time to do that either."
 [#15]
- The female manager of a Native American-owned, DBE-certified construction company said, "There are very few [pre-bid conferences and outreach sessions] on the east side [of Washington State]. On websites, I see more outreach on the mega jobs on the west side [of Washington State], jobs that are design-build. The outreach meetings for those projects are usually held during working hours. Small businesses like ours don't have the personnel to send to WSDOT informational seminars, only the big multi-million dollar DBEs attend. Having sessions later in the afternoon or in the evening would be better than mornings, especially Monday mornings. WSDOT should hold sessions in locations other than metropolitan areas of Spokane and Seattle." [#32]
- The female owner of a construction company said that pre-bid conferences were good but cautioned against making meetings mandatory. [#30]

One interviewee pointed out reasons for having pre-bid conferences in addition to connecting with other firms. The general manager of a woman-owned, DBE-certified specialty contractor said that bid conferences are very useful. "The [agencies] have [pre-bid conferences], normally because there is some difficulty on the job [that they want to address with potential bidders]. Those [meetings] are very good." [#18]

Only a few interviewees did not think that pre-bid meetings were useful. For example:

- The African American owner of a DBE-certified specialty contracting company said, "That's not going to do any good. It's [the company that] is the cheapest [that will get the job]." [#35]
- The white male co-owner of a concrete construction company reported that he does not have any difficulty marketing to prime contractors. When asked about pre-bid conferences, he said that those meetings are " ... typically a waste of my time. They just never seem to be

too productive." He explained, "I can find out everything I need to know from the bid documents, if they are properly put together." [#17]

Distribution of lists of planholders or other lists of possible prime bidders to potential subcontractors. Most of the business owners and managers interviewed supported the distribution of planholders lists.

Examples of comments in support of distribution of planholders lists include the following:

- The white male owner of an SBE-certified small business construction company said, "I don't know who the primes are and who has the plans." He commented that knowing who might bid would be helpful so his company could get its price to the potential bidders before bid submittal. [#21]
- The female manager of a woman-owned, DBE-certified construction firm said, "Yes, that's a big deal for us" when asked about distribution of planholders and other lists of possible primes. [#19]

Some interviewee discussed the services that were already available. For example:

- When asked if distributing lists of planholders or other lists to potential subcontractors would be helpful, the co-owner of a concrete construction firm said that his company had never had any problem obtaining that information, and that it usually was online. [#17]
- The white male owner of a surveying company was supportive of distributing planholders lists. He reported that such lists are now available through plan centers. [#5]
- The Pacific Islander owner of a DBE-certified engineering firm said, "The private planholders are charging \$500 a month for these. WSDOT and other government agencies should subsidize these [costs] for small businesses." [#37]
- The Subcontinent Asian American male owner of a certified engineering firm said that public agencies should distribute lists of planholders or potential prime bidders to potential subcontractors. He continued, "OMWBE has a list like that. Further segregation or further separation would be beneficial." [#10]

Other agency outreach, such as vendor fairs and events. Some business owners and managers reported that outreach such as vendor fairs and events were useful. Others no longer regularly attend those events.

Examples of positive comments about agency outreach events include the following:

- The Subcontinent Asian American male owner of a certified engineering firm, indicated that agency outreach, such as vendor fairs, are helpful. He said, "Yes, that's the huge thing. That's the key." [#10]
- The white male owner of a construction company said such meetings are useful and had attended one the prior week. [#22]
- The general manager of a majority-owned construction company said that his company attends outreach events that the AGC holds. [#33]

- The white male owner of a specialty contracting firm said that vendor fairs and events were useful. "I went to the Regional Contracting Forum and found that very helpful. I was impressed." [#20]
- The white female CEO and co-owner of a WBE-certified construction company said that outreach, such as vendor fairs, are helpful to companies starting out. [#11]
- The female co-owner of a non-certified construction company said, "Yes. [Outreach events] are great!" [#24]
- When asked if agency outreach, such as vendor fairs are helpful, the female manager of a woman-owned, DBE-certified construction company said, "Yes. That would be great. I remember [the project partnering] meetings [WSDOT] used to have. It used to be the WSDOT, the prime contractors, and the subcontractors, and [all parties] used to go to these team building meetings to help [all parties] work together. [Each party] would state what problems [it] had ... and I thought those were great." [#19]
- A discussion participant representing a diversity program office recalled that a number of DBE firms have said, "We've been very successful. We never would have met these people had you not had this level of outreach events." The participant went on to say that their office needed to follow-up with the primes and ask the primes how many new DBEs they are bringing in [as subcontractors]." [DBEP#5]

A number of business owners and managers indicated that outreach events were not useful. For example:

- The white male co-owner of a concrete construction company reported that he does not have any difficulty marketing to prime contractors. When asked about agency outreach, he did not think it was beneficial to his firm. [#17]
- The Hispanic American co-owner of an established construction company had a similar opinion. "It's a waste of time for [my company]. The general contractors know [my company], and we know [the general contractors]." [#26]
- Representatives of a Native American-owned, DBE-certified professional services firm were critical of typical agency outreach. "We go to the job fairs and we often get little meetings with small groups of people. We might meet a small business liaison for a major company, and when we follow-up, it's like the liaison doesn't even exist! I attended one last month that seemed like a great meeting. The diversity person said that we would receive a list of primes that were bidding on the project and that hasn't happened. I've contacted the company twice and I haven't heard back at all. So we just do this for fun now. How many more of these stupid situations can we get into? There's no follow-up and no commitment." [#6]
- The Hispanic American owner of a DBE-certified engineering company was critical of "generic outreach sessions." He said, "You want to go to the ones that are more specific."
 [#7]
- Representatives of a large majority-owned concrete company had a negative experience with a vendor fair they had recently attended. They said that the vendor fair was in an inconvenient location with no parking and was not sufficiently industry-specific. He commented that the fair "really wasn't worth it for us." [#15]

- The female owner of a construction firm indicated that outreach events are not useful, and that she doesn't have time to attend them. "Personally, I don't go. It's hard to take off for the day. I think people go home with a lot of business cards and don't do anything with them." [#30]
- The Pacific Islander owner of a DBE-certified engineering firm said, "[I have been to] many, many [outreach events]. [Probably] 90 percent of the agencies that show up are only doing lip service. Often [the meetings] are a waste of time." [#37]

Streamlining/simplification of bidding procedures. Most business owners said that streamlining or simplifying bidding procedures would be helpful. For example, the co-owner of a concrete construction company said, "Yeah, anything [that] can make [the process] quicker or simpler would be great." [#17]

Some business owner made specific comments about streamlined reporting requirements or reduced paperwork. For example:

- The Hispanic American co-owner of a construction company said, "Yes, [streamlining would be good]. If [my company] could sign up one time a year, 'this is [my company's] bonding company, that's [my company's] insurance company,' instead of every time filling it out. It's just another hour's worth of work for everybody to do that [each time]." [#26]
- The female co-owner of a construction company reported that bidding is not much of a problem for her company, but there is an increasing amount of it. "However, there is more and more paperwork. Twelve pages [of paperwork] these days instead of four." [#31]

Some interviewees indicated that they thought that bidding procedures were already streamlined, or that further streamlining was not needed. For example:

- The general manager of a majority-owned construction company also said that he did not think that bidding procedures were overly complicated. [#33]
- The African American owner of a DBE-certified specialty contracting company reported that "bidding is already pretty simple." [#35]
- A manager of a majority-owned construction materials manufacturer said, "Bidding is pretty standard." [#23]
- The general manager of a woman-owned, DBE-certified specialty contractor had a similar comment. "Some [agencies] could use it, but most model after the WSDOT [and that's a good process]." [#18]
- The African American owner of a DBE-certified engineering company said that he supported simplified bidding procedures but cautioned against "going overboard." He said, "There was a period of time where you'd go after an agency RFP and they would say 'Okay, you've got seven pages to do your proposal, and here are two pre-printed forms that must be in that seven pages, so you only get five pages to tell your story, and that's just ridiculous. You've got to give people enough room to tell their stories." [#8]

■ The Subcontinent Asian American male owner of a certified engineering firm said, "I don't think [public agencies] need to streamline bidding procedures. The bidding procedure is not the problem." [#10]

One business owner said that overly complex and confusing bidding processes worked to his advantage. The white male owner of a construction company reported that complex bidding was an advantage for his firm because it reduced the number of competitors. "Sometimes being smarter and being better makes the stack a little smaller." He said, "I recognize that having the skills to get through that, when the requirements are 'fill out every page, sign every signature form, have every document in place', is a big benefit. It's a kind of competitive advantage that an experienced company like mine has." [#22]

Breaking up large contracts into smaller pieces. The size of contracts and unbundling of contracts were topics of interest to many interviewees.

Most business owners and managers interviewed indicated that breaking up large contracts into smaller components would be helpful. Examples of those comments include the following:

- The Subcontinent Asian American male owner of a certified engineering firm said, "I would definitely say that [breaking up contracts into smaller pieces] would be good." He went on, "That allows more avenues for small firms to go through and get their foot in the door."

 [#10]
- The Hispanic American co-owner of a construction company made similar comments. "Yes, [breaking up large contracts] works really well." [#26]
- The general manager of a majority-owned construction company said, "Please do this! The tendency has been to go to larger contracts. It eliminates the opportunity for smaller companies. Contracts should be less than \$10 million. Less than \$5 million would [give small contractors] a lot more opportunity." [#33]
- When asked if breaking up large contracts into smaller pieces would be helpful, the white male owner of a specialty contracting firm said, "AMEN! Please unbundle!" [#20]
- A female principal of an Asian American-owned, DBE-certified engineering firm said, "A good example of unbundling is the WSDOT Alaskan Way Viaduct project. They did unbundle several packages. I know of other firms that got in because [WSDOT] unbundled the work."

 [#1]

A few business owners saw both positive and negative aspects of unbundling contracts. For example:

The female manager of a Native American-owned, DBE-certified construction company said, "Breaking up large contracts could possibly be a plus." However, she went on to indicate that larger contractors tend to win the smaller projects anyway. "Municipalities try to keep contracts under \$250,000 for small businesses to compete on. We're listed on small works rosters but very seldom get calls. The bigger contractors get the calls." [#32]

- The co-owner of a concrete construction company, who typically works as a subcontractor said, "It doesn't make any sense to me. It costs [my company] more money to go do four small jobs than it would to set down on one big one and make it go all together." [#17]
- The owner of a small construction company said, "Actually, I don't think that's a good idea. It will cost the state more money." [#34]
- The white male owner of an SBE-certified construction company made a similar comment about breaking up large contracts. "It would give more opportunity." However, he commented that breaking up large contracts into smaller ones could mean the State would have more contract administration costs. [#21]
- Representatives of a large majority-owned concrete company saw positives and negatives for breaking up large contracts. They pointed out that there is better pricing for bigger contracts and that the public owner manages a big contract better than many smaller contracts. [#15]

Price or evaluation preferences for small businesses. Interviewees also discussed bid preferences for small businesses.

Many interviewees said that price or evaluation preferences for small business would be helpful. [for example, #19, #22, #24, #8, #11, #12, #18, #30, #35, and #36]

Some interviewees identified advantages and disadvantages with preferences for small businesses. For example:

- The Pacific Islander owner of a DBE-certified engineering firm was supportive of a preference for small businesses, but said, "I think going to 'best value' is a better way to select vendors so businesses can't buy a bid by bidding too low." [#37]
- The white male owner of a small construction company said, "As a small business, I'm for it. But on the other hand, [a company] should stand on [its] own two feet." [#34]
- The Subcontinent Asian American male owner of a certified engineering firm said, "No, I'm not a big proponent of [price or evaluation preferences for small business]." He went on, "I think that small businesses should be able to prove that they are just as good as another firm. I think there'd be a lot of animosity in the industry." [#10]
- The white male owner of a surveying company was supportive of preferences for small businesses, but said, "It doesn't make sense that a small firm would get paid more, but at the same time [it] might get a little bit of a credit on the overall evaluation." [#5]
- The white male owner of a specialty contracting firm was supportive of price or evaluation preferences for small businesses, but cautioned about how "small businesses" should be defined. He said, "Certainly, anything to give small businesses a break. And small business should be defined like the City of Seattle does \$750,000 or less. Not \$2.5 million. If a company is doing \$2.5 million they aren't a small business. King County and the City of Seattle have seriously looked at the problem and dealt with it in such a constructive fashion. WSDOT really needs to look at tailoring procedures, tailoring its whole department after King County." [#20]

A few business owners did not support price or evaluation preferences for small business. For example:

- When asked if small businesses should get price or evaluation preferences, the co-owner of a concrete construction company said, "I think [government] ought to let the market dictate things, instead of trying to fix prices for people." [#17]
- The general manager of a majority-owned construction company said, "I guess I'd prefer not to do that. There's already some of that like HUB zones, 8(a) set-asides, and the like." [#33]
- A manager of a majority-owned construction materials manufacturer was not in support of price or evaluation preferences for small businesses. [#23]

Small business set-asides. The study team discussed the concept of small business set-asides with business owners and managers. That type of program would limit bidding for certain contracts to firms qualifying as small businesses.

Most business owners and managers supported small business set-asides. Examples of those comments include the following:

- The Subcontinent Asian American male owner of a certified engineering firm said, "In some industries they kind of [use small business set-asides] for some small projects." He continued, "It's a good way for them to build up." [#10]
- The Asian-Pacific American owner of a DBE-certified engineering firm said, "I don't think we will ever achieve a level playing field. There will always be small businesses and large businesses, and large businesses have advantages and will get the large contracts. They have more expensive lawyers and lobbyists than [small firms] do. I think to make a level playing field, an agency has to make it size-oriented. They could choose \$1 million or \$5 million or some other size standard. Small businesses in that category could compete against each other and not have to compete against larger firms." [#3]
- A manager of a large DBE-certified engineering firm said, "Yes, having contracts that only have competition by small businesses would be great. I know some federal agencies do that." [#9]
- A female principal of an Asian American-owned, DBE-certified engineering firm reported that some local agencies, such as the City of Seattle, do a good job with their small business roster. She said that, while it is not the same as a set-aside, it does work for her business.
 [#1]

Some business owners and managers generally supported small business set-asides but expressed some reservations about the concept. For example:

■ The Hispanic American owner of a DBE-certified engineering company with experience in the 8(a) program said that set-asides are helpful but "relationships need to be built months in advance." He said that a company needs to be prepared in advance to submit a good proposal once the set-aside opportunity arises. [#7]

- The African American owner of a DBE-certified trucking and specialty contracting company was also supportive of small business set-asides, but cautioned about how small businesses are defined. [#36]
- The female co-owner of a construction company said, "[Set asides] could give businesses like mine an advantage. However, small businesses should have less overhead and be able to compete more favorably anyway." [#31]
- The white male owner of a small construction company said that he liked the idea as a small business owner, but he thought that a business "should be able to stand on its own two feet." [#34]

Mandatory subcontracting minimums. Some business owners and managers supported requiring a minimum level of subcontracting on projects. Some interviewees did not.

Examples of comments in support of a mandatory subcontracting minimum program include the following:

- The white male owner of an SBA-certified construction firm said, "I think it's a great idea [to require subcontracting]. It gives small businesses an opportunity. Small business can't handle these big projects that are going on. It's nice if the small businesses can get in and help a little bit. It's good for everybody." [#21]
- A female principal of an Asian American-owned, DBE-certified engineering firm said, "[A mandatory subcontracting minimum program] would be great. The big firms already have a firm footing and have a lot more resources available to get large projects. The big firms will bring staff in from all over country instead using local small businesses." [#1]

Some business owners and managers had reservations concerning a mandatory subcontracting minimum program. For example:

- The Subcontinent Asian American male owner of a certified engineering firm said, "I don't know if I agree with [mandatory subcontracting minimums] across the board, but I definitely agree with that on a multidisciplinary project." [#10]
- The white male owner of a construction company said, "I don't like [mandatory subcontracting minimums] if I'm the prime contractor. As a subcontractor it might open an opportunity." [#22]
- The white male owner of a specialty contracting firm was also supportive of mandatory subcontracting minimums, but "only on jobs that would be over \$2 million." [#20]
- The African American owner of a consulting firm was supportive of mandatory subcontracting minimums, "but not if the same subcontractors are used all time. If they can diversify with the subcontractors, that's good." [#4]
- The Hispanic American owner of a DBE-certified engineering company cautioned that the mandatory subcontracting minimum would need to be designed to make sure a prime contractor "spreads [the work around to all businesses, not just the ones that [it's already] been doing business with." [#7]

A public hearing participant representing a construction company described how it is difficult to meet the minimums in a part of the state with very few qualified DBEs, "We had a job that we decided not to bid last week. ... 15 percent [was the DBE goal]. I don't know where you would come up with a percentage like that. I didn't see one quote come in from a local sub-contractor there Our minority population here is so small, and when we get even 7 percent The last job I bid on over here I actually added money to my two low DBEs to keep from paying a huge penalty to bring in another DBE contractor" [SKP#3]

Some interviewees did not like the idea of mandatory subcontracting minimums or did not think it would be effective. For example:

- A manager of a DBE-certified engineering firm said, "Yes, requiring prime [contractors] to sub out work would be good as long as [the prime contractor] is held accountable. This is what some prime [contractors] are supposed to do now but [our company] hasn't had work even though [it] was included in the proposal." [#9]
- The white female CEO and co-owner of a WBE-certified construction company said, "I don't know that that would be a good idea. I'm for less government interference [so I'm uneasy about this one]." [#11]
- The white male owner of a small construction company did not support mandatory subcontracting minimums. "This gets right back to what I don't like about government regulations. I'm tired of the government telling us how to run our businesses." [#13]
- The Native American co-owned of a construction firm was not supportive of mandatory subcontracting minimums. "No. If the prime contractor has the ability to do it on its own, let it do [the whole job]." [#16]
- The female owner of a construction company had a similar comment. "I don't think that should be a requirement if [the prime contractor] can do it all." [#30]

Small business subcontracting goals. Interviewees discussed the concept of setting contract goals for small business participation.

Many business owners and managers indicated that small business subcontracting goals would be helpful. [for example, #14, #19 #10, #24, #23, #18, #25, #27] Examples of such comments include the following:

- The African American owner of a DBE-certified trucking and specialty contracting company was supportive of small business subcontracting goals "because there are a lot of non-minority owned small businesses that need a leg up also." [#36]
- The African American owner of a DBE-certified engineering company supported small business subcontracting goals. "The big businesses that the agencies are working with now were small businesses once. Unless the agencies open up some of these doors so that small business can grow and develop, the agency is limiting their options for the competitive process, to get the best value. So all of these [suggestions for increasing small business participation] open opportunities for the agencies as well as for the small businesses." [#8]

Some business owners had concerns about the effectiveness of a small business goals **program.** For example:

- The Asian-Pacific American owner of a DBE-certified engineering firm was critical of how prime contractors react to small business goals. He said, "It's always at the tail end, in my opinion, that [the prime contractors] notice there are small business requirements that need to be met." He also said, "If there is a portion of the work to go to small businesses, competition should be limited to just small businesses. A lower size standard than the SBA standard of \$30 million should be used. I think \$30 million is too large. If a firm does \$5 million or less a year, those firms should be in a separate category and compete for portions of the work." [#3]
- The Hispanic American co-owner of a construction company indicated that voluntary goals don't seem to work, because they are not a requirement, they are just goals. [#26]
- Representatives of a Native American-owned, DBE-certified professional services firm also said that goals are not enforced and that small business goals would not make a difference.
 [#6]

Other business owners recommended against a small business subcontracting goals programs. For example:

- When asked about having small business subcontracting goals, the co-owner of a concrete construction company said he disagrees with the measure. "I think that a construction company should be able to do the work [it] wants to do. I just don't care for the government telling contractors how to do business." [#17]
- The white male owner of a construction company had similar comments, "I like goals rather than mandates. When [government] sets a mandate that [your company] has to use a certain number or percentage of small businesses on a project, it's a recipe for disaster." [#22]
- Representatives of a large majority-owned concrete company advised against a small business subcontracting goals program. "No. That just goes back to excluding low price. The hardest thing to do is figure out the percentage needed on projects to satisfy DBE goals. It takes hours. And there is some other company [who is] low and [our company] can't use it." They described the process as very challenging and time-consuming. [#15]
- The female owner of a construction company said, "As a general contractor I don't like to be told that I have to subcontract out part of my contract." She went on to say, "However, if it stops huge companies from doing a whole large contract, that would be good." [#30]

Formal complaint/grievance procedures. The study team discussed procedures for making complaints or outlining grievances.

Many business owners and managers said the formal complaint and grievance procedures would be a benefit. [for example, #17, #14#22, #13, #18, #2-1357] Examples of those comments include the following:

- The Pacific Islander owner of a DBE-certified engineering firm said, "It is necessary. Right now, [a firm] is going to end up hiring a lawyer. [The industry] needs an ombudsman." [#37]
- The female manager of a woman-owned, DBE-certified construction company said that[formal procedures] would be helpful, but that the process needs to be confidential. [#19]

Some business owners and managers did not believe complaint or grievance processes were available, or that existing processes could be improved. For example:

- The female owner of a DBE-certified specialty contracting company said that formal grievance procedures would be a benefit. She perceived that they do not exist now. [#12]
- The white male owner of a specialty contracting firm said there was a need for formal grievance procedures, and that an outside group should directly hear the complaints. [#20]
- A manager of a majority-owned construction materials manufacturer said, "Most [client] owners have [formal grievance procedures]. It just needs to go faster." [#23]
- The female owner of a construction company said, "Washington [state] could use more of that. Oregon has a CCB (Contractor's Construction Board) board and that's where [the company with a complaint] goes with everything." [#30]
- The female manager of a Native American-owned, DBE-certified construction company said that she has made informal complaints to WSDOT, and was unaware of any formal grievance or complaint process at WSDOT. "A formal procedure would be helpful as long as WSDOT did something about the complaints. There is a lot of time wasted in filling out forms and then nothing is done." [#32]
- The African American owner of a DBE-certified trucking and specialty contracting company said the formal complaint and grievance procedures were needed. "The existing procedures are not sufficient, so as a practical matter, this means there is no enforcement or monitoring. It takes so long for any of the federal agencies to do anything about it it seems like it's not important enough. There is no accountability." [#36]
- The African American owner of a DBE-certified specialty contracting company said, "There should be [availability to formal grievance procedures]. There is not one that I know of right now. I should have been able to go to the small contract department and tell them what [the prime contractor] was getting ready to do to [my company]. There's nowhere to go." [#35]

Other business owners reported that they had used existing processes and did not find them to be helpful. For example:

- The African American owner of a DBE-certified engineering company said that his firm had used formal grievance procedures. "Yes, this is important, and yes, [my firm] has used it. Was it helpful? No." [#8]
- The white female CEO and co-owner of a WBE-certified construction business said that she had used a grievance procedure related to WBE certification, and it "didn't do any good." [#11]

Other measures. Some business owners identified other neutral measures for consideration. For example:

- The Asian-Pacific American owner of a DBE-certified engineering firm offered a suggestion for addressing non-payment of subcontractors. "Public agencies should pay subcontractors directly. The prime [contractor would] have to verify all the hours and billing and say [that] everything is OK but then the public agency would pay the sub[contractors] directly, not pay the prime [contractor, who] is then supposed to pay the sub[contractors]."

 He continued, "In Washington State, this approach would reduce the payment of business and occupation (B&O) taxes which now the prime contractor has to pay and then so does the subcontractor. There's a lot of payment of B&O taxes all along the way. I have seen this work in the private sector and it works beautifully. I have seen this work on a job [outside Washington] where the owner put funds in a trust. As billings were approved, the trustee paid money from the trust to the consultants within 30 days tops and sometimes it was 15 to 20 days. I thought, 'Why can't everyone do that?'" [#3]
- When asked what WSDOT could do to provide better service and be a better agency with which to business, the interviewee said that providing more guidance on the design-build projects would really help. She said, "Understanding of what the specifications actually say, more consistency, and people skills are huge. Learn how to work with [the construction companies] instead of against them. [All the contractors are] out there to do a great job and need to work together. That's why I liked the [project partnering] team-building sessions that WSDOT used to do so much." [#19]

I. Insights Regarding Race-/ethnicity- or Gender-based Measures

Interviewees, participants in public hearings, and other individuals made a number of comments about race- and gender-based measures that public agencies use, including DBE contract goals, including comments regarding:

- Support for race-/ethnicity- or gender-based measures (*page 129*);
- Negativity towards race-/ethnicity- or gender-based measures (page 131);
- Criticism for aspects of the Implementation of the Federal DBE Program (page 132);
- Effects of Initiative 200 (page 135);
- MBE/WBE/DBE fronts or fraud (page 137);
- False reporting of DBE participation of falsifying good faith efforts (page 140); and
- Effects of DBE project goals on other businesses (page 143).

Support for race-/ethnicity- or gender-based measures. There were many comments in favor of the Federal DBE Program, including DBE contract goals.

Some individuals had positive comments about DBE contract goals and the Federal DBE Program overall. Examples of such comments include the following:

■ The president of an engineering industry trade association said that he asked his organization's members if there were any program measures that were effective in

encouraging the participation of MBE/WBE/DBE and other small businesses in public sector contracting. He indicated that the responses included:

- "Participation [in such programs] by large firms is generally more effective when mandated. Contracts with federal money still require participation."
- "Setting MBE/WBE goals for solicitation, selection, and scoring seems effective." [38]
- The Subcontinent Asian American male owner of a certified engineering firm said, "I think the program is a good thing. It allows you to get through and prove yourself." [#10]
- Concerning the difference between getting on public jobs with DBE goals versus public jobs without DBE goals, the African American owner of a DBE-certified specialty contracting company said, "[The difference is that] without DBE goals [my company] doesn't get on [the job]." He added, "In the public sector, the only way [my company] can get work is by being a DBE." [#35]
- The African American owner of a DBE-certified trucking and specialty contracting company said, "The only reason why [my company] is getting any work on the state level is because of the Federal DBE Program." [#36]
- The Subcontinent Asian American male owner of a certified engineering firm said, "The biggest barrier for work is just having the work available out there for us. ... The DBE goals help open the door and allow firms like myself to make contact with some of these larger firms. I think if it wasn't for the DBE goals a lot of these [larger] companies would just have a small, narrowly confined window of [firms] they ... use and the [larger firms] wouldn't need to or want to look outside that window." [#10]
- The female manager of a Native American-owned, DBE-certified construction company said, "[Our company] tends to bid on more [contracts] with DBE goals rather than those without goals. [It] just can't compete [for work without the goals] and sometimes I don't understand why, because it takes so much [materials], and the wages are set on these projects, and our [company's] overhead is not high. Yet there are companies that will come in maybe about one-half of our [company's] bid. It's real dog-eat-dog out there still." [#32]
- The white female owner of a DBE-certified specialty contracting company explained that the DBE designation is what the prime contractors look for as far as fulfilling the participation goals for federally-funded projects. "WBE participation is simply a voluntary goal at this time, so it wasn't worth her time to pursue it. ... [The benefits of being DBE certified is that it] forces the prime contractors to reach out and accept quotes on the projects. [My company] can bid on several items [for many of the projects]. [It] may not be the lowest bid, but if [it] has a nice enough package, [it] can get the work. Sometimes [my company] can get more work than a business that is not a DBE." [#12]
- The female manager of a woman-owned, DBE-certified construction company said, "I've only had great experiences working with [WSDOT's] DBE support [services program]." She also said setting higher MWDBE participation goals on WSDOT projects is really helpful for her firm. She explained, "The [certified firm participation goal] percentages on some projects [are going up]. [I just saw one that] was something like 23 percent. Setting the goals higher absolutely helps." [#19]

 Several owners of DBE-certified companies said that participation in the DBE Program helped their business become established and grow. [for example, Interviewees #18, #26]

Negativity towards race-/ethnicity- or gender-based measures. Some interviewees said that they did not support programs that gave advantages to MBE/WBEs.

Some interviewees said that race- and gender-based programs should be discontinued or substantially changed. For example:

- The white male owner of an SBA-certified specialty construction company said, "[The company] has worked as a subcontractor in both the private and public sectors. ... I'd guess that my [company's] work as a subcontractor is about 95 percent in the private sector and the rest of the time as a subcontractor is on public sector work. ... Typically [my company] can't get any work subcontracting on public works contracts due to the fact that there are all the different set-aside categories that prime [contractors] are trying to meet. I haven't put my business in my wife's name as most [other small contractors] have. I haven't become partners with minority- or women-[owned] firms. That's typically how [other small contractors] are meeting the requirements. I don't know if they are legitimate or not." [#25]
- When asked if he had any recommendations on how the certification process could be improved, the white male owner of a specialty contracting company said, "Eliminate it. Or at least include SBEs (small business enterprises) in the system."
 - He also said, "[The current market conditions in the area] are improving, and could improve vastly, if those who set the quotas for DBEs within WSDOT truly understood the scope of each job being worked. For example, there is a chip-seal job in Clallam County this summer that is 80 miles of road, [and that project] has a goal of 19 percent DBE [participation]. The prime contractor is a customer of mine and I know it has its own flaggers, sweepers, and truckers. Where is it going to get the 19 percent [DBE participation]? Does [it] have to lay [its] own people off for several weeks so [it] can have a DBE trucking firm come in?" He also reported, "I have the companies that want to hire my [company] but can't [because it is not a DBE]." He went on to say, "I gave four examples earlier, [when I told of going to prime contractors over the last few months and was turned away because my company is not a DBE]. What WSDOT does not seem to understand is that the first four slots that go to meet the quota system, are flagging and striping, number one; street sweeping, number two; number three is trucking, and number four is excavation and soil erosion control." [#20]
- When asked what could be done to improve the DBE program, the white male co-owner of a concrete construction company suggests that the program be cancelled. "Get rid of it all together," he suggested. "That's the only way to improve it, in my opinion." The interviewee indicated that he had started a business with his wife, and had applied for WBE certification but had the application denied. He reported, "I just don't really agree with the whole process of minority and disadvantaged business." [#17]
- The white male representative of a woman-owned, non-certified construction company said, he didn't know of any general problems for business that are owned by women or minorities in the workplace. He went on to say, "I'm of the opinion that [women and

- minority owned businesses] shouldn't have any priority at all. As far as I'm concerned, a company should stand on its own two feet." [#34]
- The white male owner of an SBA-certified specialty construction company explained, "The WSDOT projects that don't have any goals are few and far between. If there is any project without goals, [my company] would bid or try to be a subcontractor. But honestly, in the last couple of years, other than some obscure job way in some other part of the state, as tight as things are, there's nothing for me." [#25]
- The white male owner of a construction materials supply company said he is not aware of any particular issues based on race or gender. He said all small businesses have problems with cash flow. One reason businesses are bought up or merge is that being larger gives [the company] more clout. He reported that he has had experiences on contracts that had MBE and WBE requirements. "I try to stay away from [jobs with DBE goals] but they're there. [My business] doesn't bid those [jobs] as a prime [contractor]." [#2]
- The white male owner of a construction company said, "I think that the inherent danger with a program such as the [MBE, WBE, DBE certification program] is that is linked to mandates that require [contractors] to use a certain amount of disadvantaged or minority contractors, regardless of qualifications. That's when it's a problem with me. [I'm unhappy] when it gets to the point where [your company] has to hire [a certified company] because [it] is a minority contractor and [there isn't] a choice." [#22]
- When asked about race or gender specific measures that might be useful or needed, a female manager of a majority-owned construction materials manufacturer said "I don't think [race or gender] should matter. I'm in support of business support programs for these categories and for having goals for purchasing from these businesses on an agency-wide basis, but not as a part of making individual contract award decisions. [The state] should include veteran-owned businesses, too." [#23]
- A participant at a public hearing indicated that his majority-owned construction business is struggling because of the Federal DBE Program. He said, "I've lost millions of dollars worth of work, and I am scrambling out there trying to get ... work trying to survive. You've got me this close to being bankrupt because [a particular DBE] has an advantage. ... So he is healed up, and I am scrambling to try and pick up whatever I can. ... So any of this government work, he has an advantage. I don't have a shot at it in my line of work.

 He also said, "... and you call all the minorities and they are all for [the Federal DBE Program], but I can give you 20 general contractors that can't use my quote because the requirements are too high. And in this area, you take a \$1 million job and my portion of it is the concrete end of it, and they can't fulfill that obligation and so I can't bid that job because they have to fulfill the minority [goal], and its time after time to the point where I give up.

Criticism for aspects of the Implementation of the Federal DBE Program. There were several comments criticizing how public agencies implement particular aspects of the Federal DBE Program.

[YKP#1]

Some interviewees were critical about key aspects of the implementation of the Federal DBE **Program.** For example:

The African American founder of a construction industry trade association indicated that WBEs should not be included as a disadvantaged group in the Federal DBE Program. "I'm not too sure that ... we shouldn't try to [ban] these women's organizations [from the DBE Program]. It doesn't turn me on that these white girls come in here and rip us off with their husbands or whatever. They've been doing it for years." He went on to say, "In my opinion, they should get rid of ... [WBEs]. There's no need for those [businesses]. They need to throw [the whole program] out. ... These women have taken over."

He suggested that it is necessary for African American-owned businesses to collaborate to find a solution to the barriers that they collectively face. "They need to learn to work together and put their heads together to come up with [a solution]. ... It seems like they're

working against each other." He said that African American-owned businesses should work

A discussion participant representing WSDOT described a type of situation at WSDOT in which WSDOT employees will not listen to what may be valid complaints about a project plan and are told, "'You are a DBE. We don't talk to you. Our contract is with the prime, so go away. If you want to communicate [with] us, communicate through the prime.' And so the DBE goes to the prime and nothing happens. So then the DBE calls us so we go and contact and work through our channels internally They go back to the prime and the prime says, 'Oh, don't worry about it. There was nothing wrong,' or, 'We fixed it,' and

nothing ever really gets looked at with any kind of sense of urgency or fairness"

together to take a more active role in shutting jobs down if African American-owned

- The participant continued, "So ... I have one [DBE] complaining right now where they are alleging about \$50,000 they are trying to get because they had to [redo their part of a project] ... that they tried to say, 'This isn't going to work the way you have it set up.' When they went back and ...they did it the way they were trying to say it should have been done ... but in the meantime, that DBE firm who is a very, very small firm, is out that extra money which can be crippling." [DBEP#6]
- The African American owner of a DBE-certified trucking and specialty contracting company said, "[The agencies] are always screaming 'price, price, and price.' Most of these jobs require DBE participation. What becomes an issue is that the process [WSDOT uses] to give that job to the prime [contractor, does not fairly consider] DBE participation." [#36] He went on to say that the DBE evaluation part of the contract award is a major issue. He feels that the prime contractor gets to take its time and find its favorite DBE to find a special place for it. In other words, the prime contractor doesn't have to list the DBE firms to be used at the time of bidding so it can pick favorite DBEs and suggest to those firms where the price needs to be to get the work. He says that nothing stops the prime contractors from doing this and it is done all the time. [#36]
- A public hearing participant representing a construction company reported that he had been so discouraged by the lack of work that, "finally, I made a decision last year I turned back my DBE certification and took back my MBE certification, because the last ten years I tried so hard to get in for service." [SKP#4]

Regarding WSDOT's administration of the Federal DBE Program, the president of an engineering industry trade association said, "Some of the biggest issues have always been on the way the Department contracts for [a lot] of their work, which is through on-call contracts. The teams aren't as well defined as they are when it's a direct solicitation on a project. On the other hand ... a lot of firms find that if they work extra hard to meet [DBE] goals, their chances of being selected based on qualifications goes down. So it's a real balancing act on the part of the primes in particular of trying to meet the goals and [trying to] get the work.

When asked why trying to meet DBE goals would reduce the overall qualifications of a team, he responded, "In some cases, it's that a firm ... that would ordinarily do that work themselves is now going to say, 'Okay, we're going to carve out this work that we would ordinarily do ourselves and give it to a minority firm or a woman-owned firm,' and many of those firms don't have the resources that a [large international engineering firm] would have to do that work." [#38]

- A public hearing participant representing a construction company stated, "I'd like to reiterate the project specific goals based on what work is available, what firms are available and what's realistic for that project. We see a lot of them. They are way too high for what's in that regional area and what work's available. ... I've made phone calls to the state and asked them, 'How did you come up with this number?' I've gotten the response, "Well we've got the information from this bill and this bill." I want to reiterate, real time, real environment as far as what's happening. Not just to look at a piece of paper that says there are seven DBE contractors within a 50 mile radius." [AGC#3]
- A public hearing participant representing a professional association brought up the inability of areas of the state with extremely low minority numbers to meet goals. "Again, it goes back to what is the availability, what is the type of work that is here, what is the scope of that work? And I also ask you to bring in the regional directors of WSDOT when you are utilizing the people of WSDOT." [SKP#2]
- A public hearing participant representing a professional association was critical of the goal-setting in regions with limited DBE availability. He pointed out that the state is diversified by region and that there are very few DBEs in the Spokane area, and therefore local contractors could not compete for WSDOT jobs. [SKP#3]
- The white female co-owner of a non-certified construction company said, "Sometimes it's difficult to get prices from the MWBE subcontractors. It puts [my company] in a bind." [#31]

Several interviewees expressed the opinion that the definition of "small business" had grown to include multi-million dollar companies who received DBE certification and then had an unfair advantage over the truly small DBE businesses. Examples of such comments included the following:

■ The female manager of a Native American-owned, DBE-certified construction company reported, "In 2005, WSDOT told us [that our company] was the only certified ... company in the state. Now there are at least a dozen DBE ... companies in the state. The majority of [those companies] are multi-million dollar companies. I question that. I don't see a lot of disadvantage [in a multi-million dollar company]. [Our company] cannot compete as a small

business DBE in the field that [it is] in because there are DBE contractors out there that are multi-million dollar companies and [each of those companies] can afford to drop [its] wages and have lower bids than [our company]." When asked what else WSDOT can do to assist small business participation in WSDOT projects, she said, "WSDOT should have a program that [separates] the truly small businesses. The size standards are critical. The current size standards for small businesses are too high." [#32]

- A public hearing participant representing a union stated, "We have seen one contractor, we have actually done our own data collection from DOT, and what we have found is over a three-year period, one contractor got 26 percent of every dollar spent" He continued, "the top 10 DBEs did almost 80 percent of the work of every dollar that was awarded." [NSP#5]
- The president of an engineering industry trade association reported, "Now that the small business standards have changed, I hear complaining ... from everybody about the new size standards. He said that the nature of the complaints are "that size standards based on revenues isn't always applicable, and that there are a lot of firms with that level of revenues that no one would consider small firms because of the types of work that they do." He said, "Small firms think that now they've doubled the marketplace." [#38]
- However, one interviewee appears to have benefitted from the new size standards. A white female manager for an MBE/DBE/SBA certified engineering company said, "[The company] had out grown the size standard of \$4.5 million for engineering and therefore graduated and could not be a small business or DBE for that kind of work. [It] had other NAICS code work but engineering was [its] bread-and-butter. The size standard of the Small Business Administration was just increased a few months ago and that is used by OMWBE. That will be a good opportunity for us." [#9]

Some business owners said that transitioning their companies due to graduation from the DBE Program is difficult. [for example, #18 and #12] For example, the Hispanic American co-owner of a construction business said that he had worked on WSDOT projects in the past when his company was certified. He indicated that he would probably go after more WSDOT work if his company was still certified as a minority business or DBE. He also expressed interest in understanding how his business could be listed in other NAICS codes. That practice might allow his company to qualify again as a certified minority business enterprise. [#26]

Effect of Initiative 200. Interviewees discussed the impact of the passage of Initiative 200 on MBE/WBEs. In 1998, Initiative 200 amended state law to prohibit discrimination and the use of race- and gender-based preferences in public contracting, public employment, and public education, unless required by federal law. With regard to public contracting, Initiative 200 prohibited government agencies in Washington from applying race- and gender-conscious programs (e.g., contract-specific goals) to non federally-funded contracts.

A number of owners and managers of MBE/WBEs reported that the implementation of Initiative 200 had an adverse effect on their businesses. For example:

A public hearing participant representing a professional association indicated that Initiative 200 had a negative impact on the number of firms that were available to do work with WSDOT and other agencies. For that reason, he said, "There needs to be either a lengthening

- of the study period or accommodations made to include information that would show the number of firms that participated in Washington State contracting prior to I-200, as opposed to just the three most recent years, which are substantially post I-200." [SSP#1]
- A discussion participant representing a county provided statistics indicating that Initiative 200 had negatively impacted MBE/WBE/DBE utilization. She reported, "Before I-200 our overall M/W/D utilization in 1995 was 25percent, in 1996 21.6 percent, 1997 31.7 percent and in 1998 15.2 percent. And then post I-200 the first year, 1999, our overall utilization was 5.1 percent. In 2000 it was 4.8 percent. In 2001 3.8 percent and in 2002 5 percent, and in 2003 4.5 percent, 2004 4.8 percent. So you can see the difference before and after I-200. That's it. [DBEP#4]
- A public hearing participant representing a professional association said, "We have talked a lot about I-200 and I think it's time we stopped running from I-200 and start using I-200. There is no question about the impact of I-200. Let's remember, though, that people have said it overturned affirmative action it did not. In fact, the proponent in the voting effort wrote, 'This does not repeal affirmative action' The only thing it did was get [rid of] the mandatory goals. That was it. Let's remember the initiative says it is a Washington State civil rights initiative and prohibits discrimination." [NSP#9]
- A public hearing participant representing a professional association said, "Again, I think [another participant] made the point that pre I-200 [MBE/WBEs] were at 10 percent as far as the goals that were met and after the I-200 we were down to 2 percent in terms of participation on that. So again, I feel that we need to go back to that to give a true disparity to show disparity." [NSP#11]
- One of the participants in the North Seattle public hearing wrote a comment indicating that the State should go back to how it awarded contracts pre- I-200. [WT#8]
- The Subcontinent Asian American male owner of a certified engineering firm said, "So, when I-200 went through about 10 years ago, there was a definite drop for the company." He went on, "The big companies just started doing [the previously subcontracted work] in house. … I think it hurt [DBE firms] substantially." He continued, "Now, it doesn't provide an avenue for small and minority firms to prove themselves." [#10]
- The Hispanic American co-owner of a construction firm said, "In the 1990s it was great [to be a certified minority company]. It meant something to have that. Around 2000, it definitely changed, it didn't mean as much." When specifically asked about Initiative200, he said, "It took away all our state jobs, for a while, and [the company] had to shift to the private sector. [My company] didn't need the extra help just to survive. [But] did it affect our business? Yes, it did." [#26]
- The Asian-Pacific American owner of a DBE-certified engineering firm said that his firm was negatively impacted by the passage of Initiative200. "Before I-200, my firm received a lot of calls and performed a lot of work. ... I would get phone calls asking, first: are you certified, and second: can you perform 10 percent of the work [which was the MBE or DBE goal on the contract]?" He noted that most of [those] phone calls stopped after the passage of Initiative 200. "After passage of I-200, I had to reinvent my firm and even consider whether to identify my firm as MBE or DBE certified." [#3]

- The female manager of a woman-owned, DBE-certified construction company said, "I don't really know if it's I-200, or the [increased] competition, or what has more effect on the business." [#19]
- The Hispanic American owner of a DBE-certified engineering firm said about I-200, "Before that was implemented, [my firm] didn't have to be certified [as a DBE]. It was doing projects without certification. Once [the law] all went through, [it] had to get certified, because the [prime contractor or public owner] had to account for [it as a certified firm]. I was [forced] to bid on projects that [previously my firm] had been receiving based on [its] expertise. Because of the fact that [the company now] has to be certified the footprint has gotten smaller." [#7]

Some firm owners and managers did not think I-200 had adversely affected their firms. For example:

- The president of an engineering industry trade association indicated that MBE/WBE engineering companies have not been substantially affected by the passing of Initiative 200.
- When asked about Initiative 200, the female co-owner of a non-certified construction company didn't know what it was. When explained to her, she said it had no effect on their business. [#24]

MBE/WBE/DBE fronts or fraud. Many interviewees with a diverse range of experiences and opinions commented on the existence of fronts or fraud.

Several interviewees reported knowledge of examples of fronts or fraud. Some gave first-person accounts of instances they witnessed, whereas others spoke of less-specific instances or those of which they had no first-hand knowledge. For example:

- The president of an engineering industry trade association said that he is aware of MBE/WBE/DBE frauds and fronts coming out of the public sector but he is not aware of much of that taking place in the engineering industry. He explained, "Engineers are, by nature, pretty straight forward and pretty risk averse." [#38]
- A discussion participant representing a diversity program office in reference to DBE fronts said, "I think that is bigger than we all really realize ... and do we have the proper mechanisms in place?" [DBEP#5]
- A discussion participant representing WSDOT referred to fraud as "intertwinement" and stated that there are quite a few instances reported to WSDOT. ... There are firms in the State of Washington where the origin of certification has come into question from the very first time the firms were certified, based on the fact that they were firms accused of being an extension of a prime contractor, in other words a prime contractor setting up a front company." [DBEP#6]
- The white male co-owner of a concrete construction company said, "There [are] questions in my mind [about] how some [companies] obtain DBE status. I know some contractors who have a DBE status, and I don't know how they got it. So I've had questions, but ... it's not worth my time to pursue it." [#17]

- Managers of a Native American-owned, DBE-certified engineering firm reported seeing some instances of MBE/WBE/DBE fronts or fraud. [#6]
- The white male owner of a construction materials supply company said, "A lot of times, [a contractor] will get an Indian DBE [contractor] and use [it] for trucking, or pipe contractor or something. I've seen [the prime contractor] take a bunch of trucks out there that don't belong to the DBE and rent [the trucks] to [the DBE contractor], and say 'these are your [company's] trucks', when really they're not. It's really an illegal operation." [#2]
- The African American owner of an MBE/DBE-certified engineering company said, "Yes, I've seen this. I was in some WSDOT-sponsored classes [for small minority businesses] and some of the companies, particularly trucking companies, had that situation. I remember one particular woman [who owned a trucking company] who had no experience at all [in that business]." [#8]
- A white female manager of an MBE/DBE/SBA certified engineering company said, "I've heard of a company that hired a drafter who was a woman. The company then suggested that she start her own company and the company would use her to meet goals. The company was trying to craftily get around requirements and retain more of the money for [itself]." [#9]
- The general manager of a woman-owned, DBE-certified specialty contracting company reported, "I've seen a lot of this. People took it too lightly years ago. The rules weren't really enforced correctly. Being accused of this on a daily basis, [our company] works extremely hard to meet or exceed every requirement." [#18]
- The white male owner of a specialty contracting company described what happened when he attempted to report what he perceived as fraud, "My first experience [with OMWBE] was last summer when I contacted the director of OMWBE and stated that fraud is going on within a particular woman's business enterprise, that the woman's husband was directing a particular jobsite on the Washington coast. I could not complete my complaint before the director jumped in and adamantly denied that there was any fraud within the DBE system, that it was totally untrue, that it couldn't happen. Her refusal to listen to my complaint required me to go to the national level, where I was informed that I could request, under federal law, an overconcentration study. ... I asked for an overconcentration study last summer [in my particular industry], which took eight months to complete. The report said that there was no overconcentration. And, within the target area there was no mention of what companies were involved, both DBE and non-DBE, in the study group. [My opinion is] that too much of the work is going to one particular company, [which is a DBE]." He continued, "I don't see a need for special treatment. I only want equal treatment." He added, "Because of OMWBE not having competent people to ensure proper certification of firms, there are way too many fraudulent WBEs, as well as fronts. There are also way too many MBEs used as fronts ... any person requesting certification should be fully tested within their field. The owner of a trucking company should be able to do a pre-check on the equipment, should be able to back up a dump truck and hook it up to a pup. They should be able to back at night in a safe fashion. They should be truly checked out." [#20]
- The white male owner of an SBA-certified specialty construction company talked about companies he has seen over the years that changed from male ownership to female ownership in a way that looked like the male owner/operator just made his wife the owner

on paper. He said, "I've seen it where they go after the federal jobs. I haven't been involved in state jobs so I wouldn't know [about that]. He said he had no issue about anyone owning a business but what he is concerned about is the legitimacy of ownership changes. He said, "[I know from personal experience that] the women in some of these companies do not even go out on the job site. [I believe it's important to] just be honest, don't try to skirt around it." [#21]

- The white female owner of a DBE-certified specialty contracting company said, "I know [companies] now who are DBEs that have backers that are construction companies. I don't know how [anyone can] get away with that." She also said, "Actually, [with] the certified companies that [my company] deals with now, on WSDOT jobs, I don't see any issues. But I have seen it doing work out at Fairchild [Air Force Base]. There are DBE contractors out there that are in the SBA [program] that don't even own a pickup [truck]. [I see DBE companies that] hire all of the subcontractors, and the subcontractors do all of the work, and [the company] just does the paperwork." [#12]
- The female manager of a Native American-owned, DBE-certified construction company said, "It has come up in recent conversations, more now than it ever has. I think there are prime contractors fraudulently opening businesses just because the [company] wants to keep that money in [its] own pockets in a round-about way, [and these companies] all have good lawyers. It has come to light that there are prime contractors that are able to figure out that [it] can start a business over here with [the owner's] daughter or another member of the [owner's] family can start a business and become DBE certified 'like that'. And yet there's not a whole lot of scrutiny [by the certifying agencies]." [#32]
- When asked if MWDBE fronts or frauds are a problem, the white female CEO and co-owner of a WBE-certified construction company said, "Years ago, there would be people that would set up [front companies]. I don't think that's prevalent anymore." [#11]

Some interviewees explained the impact of alleged DBE fronts on their companies. Examples of such comments included the following:

- The African American founder of a construction industry trade association said, "When the fronts came in, [prime contractors] didn't need us any longer. They didn't need real [DBE] contractors any longer." His colleague added, "WSDOT hasn't got policies in place to [address DBE fronts]. In fact, [DBE fronts] are kind of rewarded. ... We're going through a situation with [decertified WBE]. They've been decertified ... and they're still on the job (large highway and bridge construction project with WSDOT) ... [WSDOT] is part of the problem." [#39]
- The African American owner of a DBE-certified specialty contracting company said, "Yes. You can see all of that on Channel Five TV. The fraud is that companies that are being certified as DBEs don't qualify because the net worth of the individuals filing the applications for certification are more than what the program allows. ... The DBE fronts are under investigation also. That would affect other DBEs, because if you are using a DBE front [company] to obtain a major project, then the front that you're using would block all of the DBE points [from being available to] any other DBE." [#35]
- The owner of a minority-owned, DBE-certified trucking company wrote that he and other firm owners experience discrimination against minority-owned companies. He indicated

that assistance favors WBEs, and that some (but not all) women-owned, DBE-certified companies have been set up "by using ... wives and daughters." As a result, he reported, African American- and other MBEs are underutilized. He wrote, "The programs that Washington has set forth, do not and will never work for the people it is supposed to work for because of discrimination and loop holes." He recommended that the overall goals for DBE participation be divided into individual goals for women-owned firms, African American-owned firms, and other minority-owned firms. [WT#7]

- The African American owner of a DBE-certified trucking and specialty contracting company gave an example of how front companies affect other companies, "There are two major trucking companies in this area that have a total of about 150 trucks. For this industry, in this area, that constitutes a monopoly. [Those companies] keep the rates low. [I've heard that those companies say], '[If you] rent two of my [company's] trucks and [you can] get the third one free.' So, [the other small truckers] are dealing with that."

 He continued, "[Bidding on projects with DBE goals is different] because the big DBE trucking companies have it all tied up. [Those big DBE trucking companies are intertwined with big prime contractors, where the DBE's owner's spouse might be employed]. ... [This is a] very big problem. I know what [a company] has to go through to get the certification. So, when other companies show up out of the blue that are new to the industry and that are intertwined with a prime contractor, [it is obvious that there is fraud going on]." [#36]
- The female owner of a DBE-certified construction company said that DBE frauds and fronts used to be a much bigger issue than they are now. "I know [fronts and frauds] used to be more prevalent. ... But I think that the pendulum has swung in the other way. I've found that I didn't have any resistance through OMWBE getting certified it just took a long time to get certified but, I think there was just so much fraudulent certification [attempts] that it clogged up the system for legitimate DBEs." She went on to say that several firms have approached her to try to figure out how to set up a WBE front (even though she is clear to them that her firm is not a WBE front). [#40]

One interviewee ran into a roadblock when trying to report an instance of a fraudulent front and expressed a desire for equal treatment rather than special treatment. The white male owner of a specialty contracting company described what happened when he attempted to report what he perceived as fraud. He pursued his complaint with the State and with federal agencies. He said that it was not properly resolved. "Because of OMWBE not having competent people to ensure proper certification of firms, there are way too many fraudulent WBEs, as well as fronts. There are also way too many MBEs used as fronts." [#20]

False reporting of DBE participation or falsifying good faith efforts. Some public agencies in Washington, including WSDOT, set DBE contract goals on certain projects. Prime contractors can meet the goals through subcontracting commitments or show good faith efforts to do so. The study team asked business owners and managers if they know of any false reporting of DBE participation or whether prime contractors falsify good faith efforts submissions.

Some business owners reported widespread abuse of the DBE Program through false reporting of DBE participation or falsifying good faith efforts. For example:

- When asked if false reporting of DBE participation or falsifying good faith efforts is a problem, the African American owner of a DBE-certified specialty contracting company said, "Yes. All of the prime [contractors] are doing that." [#35]
- A public hearing participant and owner of a DBE-certified construction company said, "I think one of the biggest problems we do have is the good faith effort. We get constantly called at the last minute. [Prime contractors] call at the 11th hour or the day before and ask to give them a quote. And all they really want to know is that you aren't quoting this job and what's your name, and they get all that information, what they want from you, but really they didn't want a quote from you. All they wanted was to put in for the good faith effort that they got." [VNP#3]
- A public hearing participant representing a DBE-certified engineering company explained, "We do surveying, construction staging, and I get faxes all kinds, e-mails to bid on a job. If the call came in today, the bid will be due the next day, and I won't have even seen the plans, and where can I find the plans to give you an estimate? It's just a show, a good faith effort, that's what it is. Good faith effort by just calling the guy. Sometimes I don't even finish the conversation and the person on the other side of the phone says, 'Well, that means you're not going to bid right?' They just can't wait to get off the phone and put a checkmark saying they called [our company] and they are not available and cannot bid the project so that good faith effort is misinterpreted and abused." [VNP#4]
- A public hearing participant representing a professional association said, "A lot of these contractors will call us the day before a bid just to check the box [for good faith efforts]. That happens way too often, all the time, where you will get a phone call, they won't tell you who they are because I am trying to write down who they are, and they won't tell you who they are other than, are you bidding this particular job or that job?" [NSP#8]
- A discussion participant representing an educational institution that hires contractors for state-funded (and sometimes federally-funded) projects stated, "What I hear frequently is that primes are using [DBE-certified companies] to win bids like when they need to submit their outreach plans, primes are coming to them or ... talking with them so that by the time we see ... see the response, it is a great outreach plan that says that they have already made contact with these minority- and women-[owned] firms that they plan to utilize but when it actually comes down to that part of the project these same contractors are not being contacted and are not being allowed to submit. [DBEP#2]
- A public hearing participant representing a union reported, "They make a phone call, and then the contractor calls them, then they don't call the subcontractor back, and so I think that [officials] in this program needs to hold OMWBE and WSDOT accountable for the prime contractors and make sure they are making the good faith effort to get these people so they can bid these contracts because we see it day in and day out." [NSP#12]
- The African American owner of an MBE/DBE-certified engineering company said, "As far as outreach goes, [my firm] has gotten phone calls [and] you know that the contractor was just putting [its] name down on a list. It's evidence that insincere outreach efforts had been made." [#8]

The Native American owner of a DBE-certified construction company wrote, "[My company] has also recently observed general contractors failing to meet established DBE participation goals at the time of bid, and relying instead upon alleged 'good faith efforts.' While [my company] firmly believes in the requirement for good faith effort, I do not believe enough emphasis is placed on requiring prime contractors to separate the available work into commercially feasible units that DBE subcontractors would be capable of performing." We went on to provide specific examples for a large project in which prime contractors required subcontractors to submit a bid for all of the designated work, with "no effort ... made to create bid packages by trade. ... It appeared to me there was almost no effort to separate the work by trade, so that relevant and capable DBE subcontractors could actually submit a bid for the type of work they were capable and approved to perform, instead of requiring them to bid a complete package" He added that it appeared that "WSDOT and its contractor on this Project are more interest[ed] in documenting their supposed compliance with good faith efforts than in actually soliciting DBE subcontractors capable of working on the Project." [WT#5]

Some interviewees representing MBE/WBEs said that prime contractors would list them on a contract to comply with the program, and then reduce or eliminate their work without informing the public agency. For example:

- The Hispanic American co-owner of a construction company said that a disadvantage to being certified is that the prime contractor would report to the owner that they would use his company for a certain dollar amount for the contract, and then reduce the work significantly without reporting that to the owner. What they thought was a \$200,000 contract might only be \$50,000 of actual work. [#26]
- When his construction company was certified, the Hispanic American co-owner reported that the general contractor would say something like, "'We don't really need [your company] to perform any work, we just need [its] minority status.' So, you take this big general contractor that's using your [company's] minority status. They pushed [the company] around quite a bit." [#26]
- Managers of a Native American-owned, DBE-certified engineering firm reported that majority-owned companies will list the firm on its proposals and then not give their company any work. [#6]
- The Asian-Pacific American owner of a DBE-certified engineering firm said, "I don't know if the following situation constitutes fraud, false advertising, or something else but I am concerned about it." He went on, "I recall a situation with [a county in Washington] in which my firm was a subcontractor on a team to fulfill a scope of work of more than 1,000 hours, which is a substantial amount of work. We only got 40 hours and the contract was done. The reason was that the contract scope got reduced according to his client, not the county. I don't know what you call that. I'm not aware of any communication or inquiry from [the] county regarding how much work his firm performed or how much it was paid by the prime or when. I'm also not aware of what my client told the county or was told by the county." He continued, "I have heard from other firms that a similar reduction in scope happened to them. I am concerned that a public agency would identify a need, seek firms to fill that need, award a contract that included small and minority business participation, and then reduce

- the scope deciding it no longer had the need and reducing participation by small and minority businesses." [#3]
- A public hearing participant representing a professional association reported a difference in terms of utilization when the prime is out-of-state or local. He said, "What we have found ... [is] when you have prime contractors who are out of state contractors or out of the country contractors who do work in the state of Washington, they tend to sign contracts with DBE firms and utilize those DBE firms through the extent of those contracts. What we have found is when you have local prime contractors, you get a little more game play and manipulation. We find instead of getting contracts now, we are getting work orders." [NSP#10]
- The female Asian American principal in an Asian American-owned, MBE/DBE-certified engineering company said she didn't know of any false reporting of DBE participation and did not quite know how that would work, because everything is invoiced and scrutinized all the time. [#1]

Some interviewees said that sometimes DBE goals are set and then reduced. For example:

- The general manager of a woman-owned, DBE-certified specialty contracting company reported, "I've not seen any falsifying of good-faith efforts. I've seen attempts to kind of change the percent requirements. The participation requirements in Washington State are extremely high, far higher than our neighbors in Oregon or Idaho, [so some companies try to get creative at times in ways that probably aren't proper.]" [#18]
- The African American owner of a DBE-certified trucking and specialty contracting company said a friend of his ran into goals being reduced. The friend's company was listed as a DBE on a state project. The prime contractor was awarded the job, met the DBE goals as a condition of award, but later the DBE goal was reduced by WSDOT. The prime contractor was told that it didn't have to comply with even the reduced goal and the DBE subcontractor lost a million dollar job. [36]

Effects of DBE project goals on other businesses. Some business owners and managers provided insights on the impact of DBE project goals on non-certified firms. For example:

- The white male owner of a construction firm wrote that his firm is adversely affected by the Federal DBE Program. He indicated that DBE-certified companies have been selected over his company for many years, even though those companies have higher prices. He wrote that DBE goals of 16 percent and 15 percent on contracts "leave no room for non-minority subs of any kind at all to be considered. Non-minority firms such as [his company] are simply locked out. Locked out period." He recommended that WSDOT abolish race- and gender-conscious goals and use race- and gender-neutral measures only. The business owner attached letters from prime contractors rejecting his company's bids for subcontracts to his written statement. The letters indicated that his company was rejected for subcontracts because prime contractors chose bids from DBEs in order to meet DBE contract goals. One letter indicated that his company had submitted the low bid for the work to be subcontracted. [WT#11]
- The white male general manager of a general contracting company noted, "I've seen some subcontractors not get selected for jobs that have DBE goals ... companies that do

- guardrails, striping, signing what is called incidental construction. Often, the low bidder is not selected [in an effort to meet DBE goals for the project]." [#33]
- The female co-owner of a non-certified construction company stated that they do not bid on jobs that have MBE/WBE/DBE project goals. [#24]
- The co-owner of a non-certified concrete company indicated that projects that have DBE or MBE/WBE goals still account for 25 percent of his company's work. [#17]
- The white male representative of a woman-owned, non-certified construction company said that his company has worked on a project with DBE goals. He explained, "The prime contractor asked if my company was a certified company, and [it] was disappointed that my company wasn't certified, but [it] still used my company anyway." [#34]

Some business owners and other individuals indicated that DBE firms submit inflated bids to primes when there are DBE contract goals on a project. For example:

- A public hearing participant representing a business development company referred to the practices of a certified contractor who had won contracts away from the speaker. "He knows he is going to get the work, so he can bid at 10 to 15 percent higher than me"
 [YKP#1]
- A public hearing participant representing a professional association reported that he has seen many bids that were inflated. "It's inappropriate and inexcusable just because someone is a DBE and the work to be done is valued at \$100,000 and they can come in and submit their numbers at \$200,000 and end up with a job because they know they are going to get it." [SKP#2]
- A public hearing participant representing a construction company reported, "[DBEs] know they have an advantage when a goal is set any business person would understand that. They would understand that they can be 5 or 10 percent above and beyond [their competitors] and still potentially get the work. And you see that when they bid. When they are in an open competitive market, their pricing is not the same. ... We will look at a subcontractor that we are very comfortable working with and they may be a couple percent[age] [points] higher in price than what the low subcontractor is and, of course, because of ease of operations, we will deal with them rather than someone else." [AGC#1]

J. DBE and other Certification Processes

Business owners and managers discussed the process for DBE certification and other certifications, including comments related to:

- Ease or difficulty of becoming certified (page 144); and
- Advantages and disadvantages of DBE certification (page 150);

Ease or difficulty of becoming certified. Many interviewees commented on how easy or difficult it was to become certified.

A number of interviewees said that the DBE certification process was reasonable and some reported that it was relatively easy. For example:

- The Subcontinent Asian American male owner of a certified engineering firm characterized the certification process as pretty comprehensive. He described an initial interview when they became certified. He said, "I thought it was a very easy process," and added that the annual re-certification was "real painless." [#10]
- The Asian-Pacific owner of a DBE-certified engineering consulting firm said, "The certification and renewal processes take about two or three days to get the forms prepared and go through [the firm's] finances to make sure the information is correct on the forms. I can understand that agencies have to make sure firms meet the criteria." [#3]
- A white female manager for an MBE/DBE/SBA certified engineering company said, "I have been involved in the [annual] renewal [process] and adding to our [company's] certification because of [its] diversified services, and that's been pretty easy. OMWBE has been good to work with. Sometimes there have been challenges in determining what NAICS codes [the company's] work fits into. The actual certification process has been pretty straightforward. Once [the company] knows what [it] needs to do, like for renewal every couple of years, it just is what it is." [#9]
- A female manager of a woman-owned DBE-certified construction firm reported that the owner's first application for certification as a WBE was pretty simple. Now, she hears that certification is much more difficult. However, she said that she just renewed and that it wasn't difficult to fill out the forms. She said, concerning DBE certification, "There have been a few [state] employees who have been wonderful helping me, if I need another code or if I had a question on how to go about a procedure, and the director of OMWBE has been amazing." [#19]
- The female manager of a Native American-owned, DBE-certified construction company said, "[The company] had to demonstrate [that it] was capable of and had experience in doing [the company's type of] jobs. So [it] had to come up with prior subcontracts. OMWBE wants to know for sure that companies listed as DBEs are able to complete the job." [#32]
- The African American owner of a DBE-certified trucking and specialty contracting company stated, "[The certification process was] really easy in the beginning. [It was mostly] showing my credentials, pay stubs, taxes, and proof of ownership. It was pretty simple then."

 However, he reported that the DBE certification process lets in front companies. "The DBE certification process allows unqualified firms to get DBE certified and thereby get competitive advantages that shouldn't be available." [#36]

Many interviewees reported difficulties with the DBE certification process. Several interviewees reported incidents in which state officials seemed too quick to make a judgment that the company applying for certification was a front. Other interviewees indicated that the certification process was difficult. Examples of such comments included the following.

■ The female owner of a DBE-certified construction company commented: "It took a long time [to become certified], even though my application was perfect. I know they're backlogged ... I think it took like 91 days or something like that." [#40]

- The president of an engineering industry trade association reported that both MBE/WBEs and even some larger, majority-owned firms that have talked to those firms have critical things to say about the DBE certification process. He said they describe the process as, "cumbersome, costly, and time consuming." He added, "Overall, I'd characterize [the DBE certification process] as most of the regulations make it harder [to become certified] as opposed to make it easier." [#38]
- A public hearing participant representing a professional association was critical of the certification process. He stated, "Paperwork that a potential DBE has to complete in order to even be qualified as a DBE in the State of Washington ... is so broken down and so lengthy that if a contractor wanted to be a DBE, it is almost impossible because they are so restricted." [SKP#3]
- The general manager of a woman-owned, DBE-certified specialty contracting company said, "The certification process has been extremely difficult [for the company's owner]. She is a white female and her husband owns a separate business. He is not a contractor, but is a supplier. Since the very beginning the assumption has been that she can't run the business, that it is run by her husband or by me or her son is doing it. The reality is that she is extremely capable of running her business, and does so on a daily basis. The WSDOT official in [a Washington city] put a sticky note on her application saying that [her business] was a front for her husband. ... When I came to the company, [I assisted in the application process and we learned about the sticky note on the application], and I knew that individual [who wrote the note] personally. I called him and asked why he thought that. He said, 'Well, it is a front, isn't it?' I said, 'The very reason there is this program is right there on that sticky note. You think it's virtually impossible for a female to run a business. I have news for you — she owns that business, not her husband.' [I explained to him how she had started and built the business and how discriminatory he was being by not even talking to her personally and taking her application seriously]. From that day on it has been a constant [problem]." He continued in his criticism of OMWBE, "The OMWBE people do not come with a helpful attitude, but rather an attitude to prove that [a woman] couldn't possibly run [her] own business. Any and all things that [the OMWBE people] could find to contest, they did." When asked about recommendations to improve the certification process, the interviewee said, "Make it a little more clear as to what the guidelines are. [The certifying agency] has people that are not aware of what they are doing making an assessment on whether [a company] is doing it right. Educate the people that are [investigating the application]. Don't go in with the idea that every business that applies is fake. That may have been warranted at one time, maybe 15 years ago. But in the year 2012, these are legitimate business people. However, the [certification investigators] come to find fault, not find fact." [#18]
- The white female owner of a DBE-certified specialty contracting company said, "To me, the whole certification process for a woman-owned company seems silly. They want you to be certified if the company is woman-owned, but if the woman's husband happens to have experience in the business then [your company] is considered a front. I can see how certification can be a benefit for public jobs that have participation goals, and in the early days, when [our company] was WBE certified, [it] did get a good sized job because of the certification. That really helped [our company] when [it] was starting out. Overall, I think the certification process is silly and arbitrary."

She went on to say, "When we first started the business, [the company] was certified as a WBE. There was so much paperwork [involved]. [Later], the interviewer said [that the company] never should have been certified in the first place. We let it go and have not reapplied." [#31]

Concerning the certification process, the white female CEO and co-owner of a WBE-certified construction company said, "[The certification process] was ugly — very, very ugly. It was really bad. I have never been so ... I've been in this business forever. I probably know more about [my specialty] than 90 percent of the [companies] in [my city]. My dad wasn't involved whatsoever [at that time]. [The certifying agency] gave me such a horrible time about being a family business. The first time that I applied, it was denied. I appealed it, and it went to a federal judge. He overturned that decision, but a person in the department overturned it again. That was before my father retired, but he was not in a position of ownership anymore. One of the comments made was that I was a glorified secretary. I know so many contractors that respect my business, and me [as the managing owner], and it was so bad. Finally one day my dad retired. When he was completely out I was able to reapply and finally received the certification. However, [the agency] said that [the company] couldn't get the DOT one, but just the state WBE certification.. Everything I own is tied to this business. Everything that goes out of here has my signature on it."

When asked what recommendations would help the certification program, the same interviewee said that she was frustrated that, during the certification process, the people were more interested in the fact that there were men involved in the business than in checking out her knowledge and experience. To her knowledge, the references were not checked and no one interviewed her to ascertain her knowledge level. She said, "[The inspectors] didn't talk to the bank and didn't talk to my references. I understand the concern about it, but this is not fun." [#11]

- A man who owned a business with his wife reported that they had applied for WBE certification but were denied. He indicated that the denial was based on his previous construction experience and the fact that the company's original financing came from his family who had a construction background. They appealed the denial but were unsuccessful. [#17]
- A Hispanic American co-owner of a construction company was interested in applying for certification for his new company, but was told that the certification would be denied. [#26]
- A minority female co-owner of a non-certified construction company said, "I looked into getting certified as a woman-owned company at one time. I was told that certification might get the company larger contracts. So I contacted the Small Business Administration and worked through them and seemed to hit a brick wall. I tried again a year later with the same results and haven't tried again since then." [#28]
- The female co-owner of a non-certified construction company stated that the firm is not certified as an MBE, WBE, or DBE and has never applied. She said, "I looked into getting certified as a woman owned company at one time. The [government agency] said that it could be a benefit to [our company]. It seemed like a lot of paperwork. At that time I was too busy to pursue it." [#24]
- The Hispanic American owner of a non-certified construction company reported that his firm, of which he is the sole owner, is not currently certified as a DBE or MBE. He said, "I

- sent ... the application a couple years ago, somehow ... everything [was] returned." He found the certification process confusing and didn't understand why his paperwork was returned without explanation, so he didn't reapply. He does mostly residential and small commercial jobs and wasn't sure that the certification was worth the effort to try to understand why the application was returned and then to reapply. [#29]
- The white male representative of a woman-owned, non-certified construction company said, that the company owner is his wife, who is a white female. The company is not WBE or DBE certified. He explained, "She's got the [WBE certification] paperwork but has never filled it out. Originally she was working on it and then we got married. [Someone] told her that she could no longer qualify her company as a WBE now that she was married and the company was community property. Since then, we have learned that the information we had was incorrect, and she's now working on the paperwork again, but it's a lot of paperwork." [#34]
- The Hispanic American owner of a DBE-certified engineering firm said, "The certification [process] was long and arduous. It's a system that needs to be reformed. It's a system that should be run as checks and balances, not as fact finding, because the people doing fact finding now don't have a clue. For example, when a person goes to the bank, looking for a loan, the [loan officer] can tell him what he is missing, what he needs, and within a week or even a couple of days he should be able to have his loan approved or not approved. Right now, when [a company] submits [its] application [to OMWBE], it should not take eight months to get a response back."
 - He went on to say that each government agency requires its own certification. "[The company] has to prove itself to King County, [it] has to prove itself to WSDOT, [it] has to prove itself with the City of Seattle, and City Light. Every single [agency needs] its own proof, because the [agencies] do not use the same system. [The company] has to be on the City of Seattle roster, [it] has to be on the City Light roster, [it] has to be on the King County roster, [iT] has to be on the GSA roster, [it] has to be on the Port of Seattle roster. [It's not enough to just be certified]." [#7]
- The African American owner of an MBE/DBE-certified engineering company said, "[The certification process can be improved by] simplifying and standardizing [it]. ... [The process for becoming a certified MBE/DBE business] was long, arduous, invasive, and often times I've found that the rosters and things like that are used to keep [the firm] at arm's length. I've often thought that since most of these agencies ask the same questions, why don't [the agencies] have just one standard certification?"
 - He continued, "Particularly when I had just started the company I'd go to [different agencies] and meet with people, and almost the first [question asked] was 'Is your company on our roster?' In other words, 'I'm not going to talk to you until your company is on my roster.' It's a reason for not talking [to your company], a way to keep your company at bay." [#8]
- The white female owner of a DBE-certified specialty contracting company said, "[The certification process] was very difficult. The questions that were asked during the certification [process] were generic [and difficult to answer], like about engineering and bookkeeping, that had nothing to do with highway construction. It was very time consuming. It took me nine months [to get the company certified], and I had to get the WSDOT district engineers to write letters of support to finally get approved."

She went on to say, "Now, with all the new regulations, I had to get the company re-certified for the signing NAICS code, even though [the company] had been doing it from the beginning. It was time consuming and expensive to resolve, and the agency doesn't give you any options, [it] just sends a letter saying [the company] has 30 days to give just cause." When asked what recommendations would help the certification program, she offered, "I think the on-site inspections are great. [The inspectors] need to be sure that [the business owner] is not just sitting in the living room with a briefcase. [The inspectors] need to look at the equipment and the titles. [The agency] needs to see if there is someone behind the scenes that might be the driving force of the DBE." [#12]

- The African American owner of a DBE-certified specialty contracting company explained, "[The process of getting certified] is discouraging from the beginning. As I recall, both times that I did it ... in 1985 and then again ... in 1996, that certification process was about 50 pages long. A small business owner isn't just going to pick this up and complete it easily. [The application asks all kinds of questions]: [does the applicant have] kids, their middle names, years they were born, if [the applicant's] parents are dead, everything. It would take quite a while to complete that package. It is depressing to look through it, but it really isn't difficult." [#35]
- When asked if he had any suggestions for improving the certification process, the African American owner of a DBE-certified trucking and specialty contracting company said, "Oh, yes. [OMWBE's employees] call themselves 'analysts'. [An analyst] needs to have a background in the industry [that is being] analyzed as well as in contracting so [he/she] will know what [he/she is] talking about. [The OMWBE employees] have a responsibility to the public and the agency. [He/She] needs to know the firm has the credentials and history to perform the work. When [he/she] does the on-site evaluations, [he/she] should go on a ride so [he/she] can go the extra step to make sure the applicant is qualified."

He went on to say, "The DBE application [process] needs to be re-vamped. The CFR [that governs the DBE process] needs to be re-vamped. There are so many loop-holes that allow you to cheat the system. Currently, if you get decertified, you still get to keep your contracts. There are a lot of questions that need to be asked. When I go to the Department of Licensing to get a commercial license, I have to take a skill test. The DBE application should have a skill test [also]."

He added more suggestions, "[The State] has no enforcement. I sent an e-mail to the Federal Highway Administration identifying some bullet points about how the application process should be changed. I've got a lot of good bullet points. It would stop the fraud. This program has been around [for decades] and there's never been an African American graduate from the DBE program. What does that tell you? The federal government and the State aren't learning from the past."

The same interviewee asked for more openness. "[For example], there needs to be public notification on who is seeking certification to give the public a 30-day opportunity to comment. Right now, companies are secretly being certified. I am the only one that seeks information on what companies are seeking certification. Once or twice a month, I ask OMWBE for information on the companies seeking certification. I pull information on [the companies] to the best of my ability and turn in a formal complaint with this information to OMWBE. Six companies have been denied certification because of this. I'm doing the best I can to keep the program as clean as possible." [#36]

- Managers of a Native American-owned, DBE-certified engineering firm said, "[The certification process] can be onerous. It used to be that the agency would notify the firm every year that it had 15 days to recertify, or [it] gets booted out." The pair went on to complain that the firm was given a very short period of time to comply with the request and that happened year after year. "[Recently], that [15 day] process got changed to a 30 to 45 day process. Everything else is 30 to 45 days; I don't know why that should be any different." [#6]
- The female Asian American principal in an Asian American-owned, MBE/DBE-certified engineering company said, "[Our firm] learned the hard way that the DBE certification is federal, so I thought that once [the firm] was certified in the home state, that [it] was a DBE everywhere, and [it] just needed to apply for the MBE designation in each state. I found out later that the DBE designation also needs to be applied for and verified in each state that [the firm] intends to use it. I think that is ridiculous!"
 - She added, "[The certification process] is annoying but not difficult; it's long and tedious. Sometimes I don't think they are necessarily clear in what they are asking for. I have put together and submitted pretty comprehensive packages and then been told to submit more." She said OMWBE and certifying agencies in other states have asked for copies of documents that she has been told by the bank are illegal to copy (e.g., signatory cards on bank accounts). She continued, "We were banking at a [financial institution] in our building and they refused to give us a copy of our signatory card for the DBE application. So, [to comply with the certification application request], we closed out that account and opened an account at another bank, just to get a copy of the signatory card." She said after submitting all of the requested documentation to OMWBE, the agency asked for all the same documents from her and the spouse of the owner as well. The added documentation caused the certification process to take much longer than necessary. [#1]

Advantages and disadvantages) of DBE certification. Interviews and public hearings included broad discussion of whether and how DBE certification helped subcontractors obtain work from prime contractors.

Many of the owners and managers of DBE-certified firms interviewed indicated that certification helped their business get an initial opportunity to work with a prime contractor. For example:

- The president of an engineering industry trade association said, "The advantage of being certified is that if Firm A is certified and Firm B isn't and they both do the same work, and they're going to subconsult to a firm that needs to [meet a DBE] goal, then the certified firm is going to get the work more often than not." He said that he does not know whether there are any disadvantages associated with DBE certification. [#38]
- The female representative of a woman-owned, DBE-certified construction company said that there are benefits to being certified. "When [a project] has to have 25 percent goals, [the prime contractor] has to use DBEs and can't do all the work itself. [It has] got to use subcontractors." She said working on projects with participation goals as a certified DBE comprises 80 to 90 percent of her company's volume. "Some of the types of work [our company does] the prime [contractor] can do [itself] if there isn't the goal." She said she has not seen any disadvantages to being a certified company. [#19]

- The female owner of a DBE-certified construction company said, "[It] definitely gives you opportunities that you perhaps wouldn't normally have exposure to. I'm extremely fortunate that some of the biggest public works projects that will ever been done in our region during my working life are being done right now. ... I wouldn't have been [exposed to those projects] if I wasn't DBE certified." [#40]
- The Subcontinent Asian American male owner of a DBE-certified engineering firm said,
 "The advantages [of being certified] —a lot of the federally-funded projects have
 requirements for small, minority business participation, and for those projects it's been a
 real great asset, where we've been working for these [non-certified] companies for so long.
 It's not that they're using us just because of our status, but our status helps them with the
 larger picture [of meeting the requirements]." As an example, he spoke about a large
 engineering firm that used his company initially because his company was certified, but the
 larger firm was pleased with the work and continued to use his firm even when the DBE
 participation wasn't needed. He went on to say, "[The MBE/DBE certifications have been] a
 good springboard to ... show and prove ourselves."
 - The business owner went on to say that "probably at least 70 to 80 percent of our projects are projects that have DBE goals." He said that his firm would suffer a 20 to 30 percent decrease in revenue if it lost its DBE status. [#10]
- The Hispanic American co-owner of a construction company said that certification as a minority-owned firm was important to the growth of their business. [#26]
- The Asian-Pacific American owner of a DBE-certified engineering firm said that he uses his certification status to market the firm. "I say first, [the firm] is a great engineering firm and second, [the firm] is certified. … I decided to get [my firm] certified because I thought it would give it an opportunity to get work." He went on to say that he tried to get on Department of Defense contracts as a subconsultant. Even though prime contractors were supposed to subcontract out a large portion of the contracts to small businesses, and expressed interest in his firm, "nothing ever came of it."
 - In response to a question about whether his firm works for the same contractors on public and private contracts, the Asian-Pacific American owner of a DBE-certified engineering firm said, "[My firm will] be contacted by prime [contractors] if public contracts have goals, but not very often if public contracts don't have goals." He went on to say, "I have known a [prime] contractor for over ten years now but the only time he contacts [my firm] is if there is a contract with goals on the project." [#3]
- The female Asian American principal in an Asian American-owned, MBE/DBE-certified engineering company said that the firm is certified as an MBE and DBE in Washington State and other states. When asked why the firm was certified in a number of states, she said that it applied for certification because prime contractors gave them the opportunity to do the job if they could be certified.
 - When asked if there are benefits to being a certified MBE/DBE firm, she answered, "Definitely, yes [there are advantages to being certified]. [Firms like ours] benefit when [the public owner] puts in goals for MBE or DBE or WBE, [which] encourages the bigger firms, that 800 pound gorilla, to include the smaller firms. That's why we go to all the trouble."
 - However, she went on to report that the work her firm does as professional engineers is a tiny drop in the bucket on large public projects and does not really help with meeting

MBE/DBE goals in any meaningful way. She said, "The contracts are for millions and millions of dollars. [The prime contractor] will include us [to meet goals], but since [our] design services only amount to \$50,000 to \$100,000, it's a drop in the bucket, point something percent. [Then] [the prime contractor] will use a [certified] excavator or hauler for \$12 million or something. [Our firm is used] just because [it] always does [the] work for them." [#1]

- A white female manager of an MBE/DBE/SBA certified engineering company sees certification as a benefit, "[Certification] provides opportunities to work on projects that [the company] probably couldn't otherwise work on. The larger projects [it] couldn't go after on [its] own but [it] could get parts of [the contract] by fulfilling the small business or DBE goals. That's the real advantage [of being certified]." She went on to say that the company sometimes meets the DBE goal as a prime contractor. [#9]
- In speaking of the advantages to being certified, the white female CEO and co-owner of a WBE-certified construction company recalled, "[My company] has had contractors that were trying to meet goals and being certified helps [those contractors] meet the goals." However, she said, "I don't know [if there are disadvantages of being a certified company]. [The company] doesn't rely on [being certified]. I don't know what percentage [of the work our company does is to meet goals], but it's pretty small." [#11]
- The general manager of a woman-owned, DBE-certified specialty contracting company said, "[The company] gets more opportunities [on projects that have DBE goals] because of the 'good faith effort' requirement. [The prime contractor has to report on how many DBE companies were contacted in an effort to utilize DBE companies on the project], so [our company] gets on a [prime contractor's] list for a type of work and when [the prime contractor sends out a solicitation that includes the type of work our company does, our company gets notified of the opportunity]." [#18]
- The female owner of a DBE-certified specialty construction firm reported advantages to some certifications, "Having [the] DBE certification has absolutely been a benefit because it did not just open doors, it opened double doors." She continued, "Typically, a contractor is pretty much set on who [it] is going to use on whatever [it] is going to sub out but I was told it would be a good thing to be DBE-certified because the WBE certification wasn't doing anything for [my company] because the WBE goals are voluntary. With DBE goals being required goals, there would be opportunities for [the company]. I was told to seek out as many certifications as I could and use [those certifications] to [my company's] advantage to get customers."

She added, "Most of the time when [my company] is called it [is by] a contractor [who] is in need of fulfilling a required goal. It gives [my company] the double door —a fantastic opportunity to show a contractor what [it] is capable of where [it] might not have had the chance [if there were no] goals. With the WBE certification, unless [there is] a contractor that is interested in fulfilling voluntary goals, [my company doesn't get a] call." She reported that contractors who have used her company on public contracts that had goals will also call it to work on private contracts. "[My company] was given an opportunity to show the [contractor] what [it] can do and when [it] does that, [it] gets [more] work. [My company] has to provide the best service." [#27]

- The female manager of a Native American-owned, DBE-certified construction company said, "There wasn't any advantage in having a DBE certification until WSDOT started having DBE goals on [its] contracts. ... [The advantage of being a certified DBE] is on contracts that have DBE participation as a condition of award. About 90 to 95 percent of our [company's] work is because [it] is a certified DBE." She went on to say, "We found that [our company] cannot be competitive if the DBE goals are voluntary." She also said, "[The company] works as a prime but that is not affected by our DBE status. All of our DBE participation is as a subcontractor." [#32]
- The African American owner of a DBE-certified specialty contracting company said, "[The company became certified] to get access to government jobs. Without that DBE certification [my company] probably wouldn't be working on any government jobs, period. ... The benefits of certification is getting [my company] access to government highway projects. That is the only thing that it has done. There's nothing else. I don't know of any [disadvantages to the certification program]. ... [My company] does about 60 percent of its business [on projects with DBE participation goals]." [#35]
- The African American owner of a DBE-certified trucking and specialty contracting company stated, "[My company] does 98 percent of [its work now on projects that have [DBE goals]. ... [My company] is getting very few calls from the private side now." [#36]
- The African American owner of an MBE/DBE-certified trucking company said that he often talked with prime contractors about trucking assignments before his firm was DBE-certified. He wrote, "All they tell me [is] 'when you get your certification, send it to us and we will talk." He indicated that even though his firm has well-maintained trucks and competitive rates, "They [primes] do not even want to hear that." He reported that it is very difficult for minority business owners to obtain work. He concluded, "We need the DBE Program because that is the only way to get in the door. It also ensures a level playing field in which DBEs can compete fairly for DOT assisted contracts" [WT#3]

Some interviews indicated that there are limited advantages, or even disadvantages, to being DBE certified. For example:

- The Hispanic American owner of a DBE-certified engineering firm said that certification has limited benefit. "There are benefits to being certified if you knock on doors and attend outreach meetings. But if I attend maybe 50 [civil engineering-related outreach] meetings in Washington State, [my company] may get one opportunity. If I attend five meetings in aerospace, [my company] gets five opportunities." [#7]
- Managers of a Native American-owned, DBE-certified engineering firm said, "The perceived benefit of certification is that [the] firm would have an information chain, possibly assistance in winning state and/or federal work. [If] you ask me how much [of that perceived benefit the firm] has received, I'd say zero." They said that they have reported to the State that even though their company is listed in the OMWBE directory that no prime contractor had ever called to ask for a bid or tell them about a project that it needed minority participation on.

One manager went on to say, "The lack of [receiving work as a certified firm] is not from lack of trying. I want to make that clear. It's not for lack of meeting with WSDOT and/or [General Administration] and/or other agencies, and/or going to their training seminars,

- etc." The managers added, "There are no advantages [to being a certified professional services firm]. There possibly could be a disadvantage. If [a presentation is to any company or agency] other than a tribe, I almost think [the firm] should [avoid mentioning the certification status.] [It] doesn't, but [there have been suggestions to do this] at times." [#6]
- The general manager of a woman-owned, DBE-certified specialty contracting company said, "[The benefit of certification] is that it gave [the company] opportunities that it would not have had otherwise. ... [The disadvantage of certification], if there is one, is the stigma [that is] attached to minority business that [most are] not self-supporting. That isn't entirely false, but it is [false] in the case [of this company]. However, there are many DBE businesses that can't perform, so sometimes [prime contractors] begrudgingly give work [to DBE certified companies]. [This company] is well established now, and we hear the complaints of [prime contractors] who would give [our company] work even without the DBE certification." [18]
- When asked if there were any disadvantages to being a certified firm, the female manager of a Native American-owned, DBE-certified construction company replied, "The prime contractors don't like to have to pick us. Contractors may show that on the job site. Not as much in the last year or so as we saw at the very beginning in 2006 [when the DBE goal as a condition of award was instituted]." [#32]
- The Pacific Islander owner of a DBE-certified engineering and specialty construction company reported, "Being certified got [my firm] recognition that [it] is here doing business but it doesn't necessarily mean the government would give [it] business. ... For a small, minority business, it is really hard to get into the market and prevail. The idea was to ramp up the business by getting some help from the federal and state governments."

 He continued, "At the end of this year, [my firm] is done with the 8(a) program. It takes about five years to get recognized [as a quality firm]. There's not enough time to really build the business. Another four or five years would be really helpful." He went on to say, "In some cases, it could be said that there are disadvantages. [My company is] running out of time [with its 8(a) certification]. The benefits of the program haven't been [realized as I expected]. When I realized this I held back on [company] financing. [A business] that doesn't do this would find [it]self in trouble." [#37]

Appendix K.

Detailed Disparity Results

Figure K-1

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Figure K-2.
Agency: WSDOT and Local Programs
Funding source: FHWA- and State-funded
Time period: FY 2009, 2010 and 2011
Type: Construction and Engineering

Role: Prime Contractors, Subcontractors and Suppliers

Region: Washington

Firm T	уре	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (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	11,385	\$6,287,222	\$6,287,222				
(2)	MBE/WBE	2,739	\$736,333	\$736,333	11.7	8.7	3.0	134.8
(3)	WBE	1,540	\$406,726	\$406,726	6.5	2.9	3.6	200+
(4)	MBE	1,199	\$329,607	\$329,607	5.2	5.8	-0.6	89.9
(5)	African American-owned	168	\$86,607	\$86,848	1.4	0.9	0.4	145.7
(6)	Asian-Pacific American-owned	307	\$65,769	\$65,952	1.0	0.6	0.4	170.2
(7)	Subcontinent Asian American-owned	33	\$9,866	\$9,893	0.2	0.6	-0.4	27.5
(8)	Hispanic American-owned	255	\$61,325	\$61,495	1.0	1.9	-0.9	52.6
(9)	Native American-owned	393	\$105,127	\$105,419	1.7	1.8	-0.2	91.3
(10)	Unknown MBE	43	\$912					
(11)	DBE-certified	1,309	\$242,604	\$242,604	3.9			
(12)	Woman-owned DBE	608	\$100,570	\$100,570	1.6			
(13)	Minority-owned DBE	701	\$142,034	\$142,034	2.3			
(14)	African American-owned DBE	128	\$12,601	\$12,601	0.2			
(15)	Asian-Pacific American-owned DBE	141	\$25,911	\$25,911	0.4			
(16)	Subcontinent Asian American-owned DBE	21	\$4,724	\$4,724	0.1			
(17)	Hispanic American-owned DBE	130	\$42,582	\$42,582	0.7			
(18)	Native American-owned DBE	281	\$56,216	\$56,216	0.9			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	0.0			
(21)	Unknown DBE	0	\$0					

 $Note: Spread sheet \ rounds \ numbers \ to \ nearest \ thous and \ dollars \ or \ tenth \ of \ one \ percent. \ WBE \ is \ white \ women-owned \ firms.$

^{*} 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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-3.

Agency: WSDOT and Local Programs Funding source: FHWA- and State-funded Time period: FY 2009, 2010 and 2011

Type: Construction

Role: Prime Contractors, Subcontractors and Suppliers

Region: Washington

		(a) Number of contracts (subcontracts)	(b) Dollars in sample	(c) Estimated total dollars	(d) Actual utilization (column c / column c, row1)	(e) Utilization benchmark (availability)	(f) Difference (column d - column e)	(g) Disparity index
Firm Ty	уре	in sample	(thousands)	(thousands)*	%	%	%	(d / e) x 100
(1) A	All firms	9,088	\$5,792,801	\$5,792,801				
(2)	MBE/WBE	2,435	\$675,052	\$675,052	11.7	8.3	3.3	140.2
(3)	WBE	1,352	\$363,454	\$363,454	6.3	2.7	3.6	200+
(4)	MBE	1,083	\$311,597	\$311,597	5.4	5.6	-0.2	95.6
(5)	African American-owned	160	\$86,295	\$86,453	1.5	0.9	0.6	161.8
(6)	Asian-Pacific American-owned	288	\$64,490	\$64,609	1.1	0.6	0.5	187.9
(7)	Subcontinent Asian American-owned	4	\$1,084	\$1,086	0.0	0.3	-0.3	5.6
(8)	Hispanic American-owned	242	\$60,691	\$60,802	1.0	2.0	-0.9	53.4
(9)	Native American-owned	358	\$98,466	\$98,647	1.7	1.8	-0.1	94.3
(10)	Unknown MBE	31	\$571					
(11)	DBE-certified	1,204	\$229,695	\$229,695	4.0			
(12)	Woman-owned DBE	548	\$92,600	\$92,600	1.6			
(13)	Minority-owned DBE	656	\$137,094	\$137,094	2.4			
(14)	African American-owned DBE	121	\$12,366	\$12,366	0.2			
(15)	Asian-Pacific American-owned DBE	133	\$25,645	\$25,645	0.4			
(16)	Subcontinent Asian American-owned DBE	2	\$967	\$967	0.0			
(17)	Hispanic American-owned DBE	125	\$42,077	\$42,077	0.7			
(18)	Native American-owned DBE	275	\$56,040	\$56,040	1.0			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	0.0			
(21)	Unknown DBE	0	\$0					

 $Note: Spread sheet \ rounds \ numbers \ to \ nearest \ thous and \ dollars \ or \ tenth \ of \ one \ percent. \ WBE \ is \ white \ women-owned \ firms.$

^{*} 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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-4.

Agency: WSDOT and Local Programs Funding source: FHWA- and State-funded Time period: FY 2009, 2010 and 2011

Type: Engineering

Role: Prime Contractors, Subcontractors and Suppliers

Region: Washington

		(a) Number of contracts (subcontracts)	(b) Dollars in sample	(c) Estimated total dollars	(d) Actual utilization (column c / column c, row1)	(e) Utilization benchmark (availability)	(f) Difference (column d - column e)	(g) Disparity index
Firm Ty	rpe	in sample	(thousands)	(thousands)*	%	%	%	(d / e) x 100
(1) A	III firms	2,297	\$494,421	\$494,421				
(2)	MBE/WBE	304	\$61,281	\$61,281	12.4	13.1	-0.7	94.9
(3)	WBE	188	\$43,272	\$43,272	8.8	4.8	4.0	182.7
(4)	MBE	116	\$18,009	\$18,009	3.6	8.3	-4.6	44.1
(5)	African American-owned	8	\$313	\$319	0.1	1.3	-1.2	5.1
(6)	Asian-Pacific American-owned	19	\$1,279	\$1,304	0.3	0.9	-0.6	29.9
(7)	Subcontinent Asian American-owned	29	\$8,781	\$8,951	1.8	3.3	-1.5	54.5
(8)	Hispanic American-owned	13	\$634	\$646	0.1	0.6	-0.5	21.1
(9)	Native American-owned	35	\$6,661	\$6,789	1.4	2.2	-0.8	62.8
(10)	Unknown MBE	12	\$342					
(11)	DBE-certified	105	\$12,910	\$12,910	2.6			
(12)	Woman-owned DBE	60	\$7,970	\$7,970	1.6			
(13)	Minority-owned DBE	45	\$4,940	\$4,940	1.0			
(14)	African American-owned DBE	7	\$235	\$235	0.0			
(15)	Asian-Pacific American-owned DBE	8	\$266	\$266	0.1			
(16)	Subcontinent Asian American-owned DBE	19	\$3,758	\$3,758	0.8			
(17)	Hispanic American-owned DBE	5	\$505	\$505	0.1			
(18)	Native American-owned DBE	6	\$176	\$176	0.0			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	0.0			
(21)	Unknown DBE	0	\$0					

 $Note: Spread sheet \ rounds \ numbers \ to \ nearest \ thousand \ dollars \ or \ tenth \ of \ one \ percent. \ WBE \ is \ white \ women-owned \ firms.$

^{*} 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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-5.

Agency: WSDOT and Local Programs
Funding source: FHWA- and State-funded

Time period: FY 2009

Type: Construction and Engineering

Role: Prime Contractors, Subcontractors and Suppliers

Region: Washington

Firm Ty	ma	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (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	/6	70	(u / e/ x 100
(1) A	Il firms	4,244	\$1,391,430	\$1,391,430				
(2)	MBE/WBE	1,016	\$249,666	\$249,666	17.9	13.2	4.7	136.0
(3)	WBE	538	\$110,295	\$110,295	7.9	4.4	3.5	179.2
(4)	MBE	478	\$139,371	\$139,371	10.0	8.8	1.2	114.2
(5)	African American-owned	59	\$57,108	\$57,280	4.1	1.1	3.1	200+
(6)	Asian-Pacific American-owned	94	\$20,076	\$20,136	1.4	1.0	0.5	147.2
(7)	Subcontinent Asian American-owned	13	\$3,118	\$3,128	0.2	0.9	-0.6	26.1
(8)	Hispanic American-owned	104	\$20,688	\$20,750	1.5	3.1	-1.6	48.1
(9)	Native American-owned	190	\$37,962	\$38,077	2.7	2.8	0.0	99.0
(10)	Unknown MBE	18	\$418					
(11)	DBE-certified	591	\$98,994	\$98,994	7.1			
(12)	Woman-owned DBE	261	\$44,865	\$44,865	3.2			
(13)	Minority-owned DBE	330	\$54,128	\$54,128	3.9			
(14)	African American-owned DBE	49	\$4,321	\$4,321	0.3			
(15)	Asian-Pacific American-owned DBE	53	\$13,943	\$13,943	1.0			
(16)	Subcontinent Asian American-owned DBE	13	\$3,118	\$3,118	0.2			
(17)	Hispanic American-owned DBE	61	\$12,756	\$12,756	0.9			
(18)	Native American-owned DBE	154	\$19,991	\$19,991	1.4			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	0.0			
(21)	Unknown DBE	0	\$0					

 $Note: Spread sheet \ rounds \ numbers \ to \ nearest \ thous and \ dollars \ or \ tenth \ of \ one \ percent. \ WBE \ is \ white \ women-owned \ firms.$

^{*} 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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-6.

Agency: WSDOT and Local Programs
Funding source: FHWA- and State-funded

Time period: FY 2010

Type: Construction and Engineering

Role: Prime Contractors, Subcontractors and Suppliers

Region: Washington

Firm T	ype	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (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) A	All firms	3,883	\$1,742,545	\$1,742,545				
(2)	MBE/WBE	887	\$247,586	\$247,586	14.2	11.4	2.8	124.4
(3)	WBE	517	\$133,946	\$133,946	7.7	4.0	3.7	191.7
(4)	MBE	370	\$113,640	\$113,640	6.5	7.4	-0.9	88.0
(5)	African American-owned	57	\$18,448	\$18,490	1.1	1.1	0.0	98.2
(6)	Asian-Pacific American-owned	122	\$21,265	\$21,313	1.2	0.7	0.5	169.5
(7)	Subcontinent Asian American-owned	12	\$3,821	\$3,829	0.2	0.8	-0.6	26.2
(8)	Hispanic American-owned	77	\$20,641	\$20,688	1.2	2.3	-1.1	52.3
(9)	Native American-owned	90	\$49,209	\$49,320	2.8	2.5	0.3	113.3
(10)	Unknown MBE	12	\$256					
(11)	DBE-certified	363	\$85,187	\$85,187	4.9			
(12)	Woman-owned DBE	177	\$30,078	\$30,078	1.7			
(13)	Minority-owned DBE	186	\$55,109	\$55,109	3.2			
(14)	African American-owned DBE	45	\$6,566	\$6,566	0.4			
(15)	Asian-Pacific American-owned DBE	44	\$5,155	\$5,155	0.3			
(16)	Subcontinent Asian American-owned DBE	4	\$628	\$628	0.0			
(17)	Hispanic American-owned DBE	34	\$16,101	\$16,101	0.9			
(18)	Native American-owned DBE	59	\$26,660	\$26,660	1.5			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	0.0			
(21)	Unknown DBE	0	\$0					

 $Note: Spread sheet \ rounds \ numbers \ to \ nearest \ thous and \ dollars \ or \ tenth \ of \ one \ percent. \ WBE \ is \ white \ women-owned \ firms.$

^{*} 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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-7.

Agency: WSDOT and Local Programs
Funding source: FHWA- and State-funded

Time period: FY 2011

Type: Construction and Engineering

Role: Prime Contractors, Subcontractors and Suppliers

Region: Washington

Firm Ty	vno.	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (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 / c / x 100
, ,	.ll firms	3,258	\$3,153,247	\$3,153,247				
(2)	MBE/WBE	836	\$239,081	\$239,081	7.6	5.2	2.4	146.1
(3)	WBE	485	\$162,485	\$162,485	5.2	1.5	3.6	200+
(4)	MBE	351	\$76,596	\$76,596	2.4	3.7	-1.2	66.3
(5)	African American-owned	52	\$11,051	\$11,086	0.4	0.8	-0.5	42.7
(6)	Asian-Pacific American-owned	91	\$24,428	\$24,505	0.8	0.4	0.4	196.2
(7)	Subcontinent Asian American-owned	8	\$2,927	\$2,936	0.1	0.3	-0.2	31.5
(8)	Hispanic American-owned	74	\$19,995	\$20,058	0.6	1.1	-0.5	58.5
(9)	Native American-owned	113	\$17,956	\$18,012	0.6	1.1	-0.5	53.8
(10)	Unknown MBE	13	\$238					
(11)	DBE-certified	355	\$58,423	\$58,423	1.9			
(12)	Woman-owned DBE	170	\$25,627	\$25,627	0.8			
(13)	Minority-owned DBE	185	\$32,796	\$32,796	1.0			
(14)	African American-owned DBE	34	\$1,715	\$1,715	0.1			
(15)	Asian-Pacific American-owned DBE	44	\$6,813	\$6,813	0.2			
(16)	Subcontinent Asian American-owned DBE	4	\$978	\$978	0.0			
(17)	Hispanic American-owned DBE	35	\$13,725	\$13,725	0.4			
(18)	Native American-owned DBE	68	\$9,566	\$9,566	0.3			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	0.0			
(21)	Unknown DBE	0	\$0					

 $Note: Spread sheet\ rounds\ numbers\ to\ nearest\ thousand\ dollars\ or\ tenth\ of\ one\ percent.\ WBE\ is\ white\ women-owned\ firms.$

^{*} 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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-8.

Agency: WSDOT and Local Programs Funding source: FHWA-funded Time period: FY 2009, 2010 and 2011 Type: Construction and Engineering

Role: Prime Contractors, Subcontractors and Suppliers

Region: Washington

Firm T	ype	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (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	9,321	\$5,112,353	\$5,112,353				
(2)	MBE/WBE	2,393	\$585,262	\$585,262	11.4	8.4	3.0	135.6
(3)	WBE	1,341	\$309,757	\$309,757	6.1	2.9	3.2	200+
(4)	MBE	1,052	\$275,506	\$275,506	5.4	5.5	-0.2	97.1
(5)	African American-owned	147	\$63,276	\$63,424	1.2	0.8	0.4	151.5
(6)	Asian-Pacific American-owned	273	\$62,323	\$62,469	1.2	0.6	0.7	200+
(7)	Subcontinent Asian American-owned	28	\$9,811	\$9,834	0.2	0.5	-0.3	36.2
(8)	Hispanic American-owned	224	\$51,357	\$51,477	1.0	1.8	-0.8	55.0
(9)	Native American-owned	346	\$88,095	\$88,301	1.7	1.8	-0.1	95.1
(10)	Unknown MBE	34	\$643					
(11)	DBE-certified	1,179	\$219,059	\$219,059	4.3			
(12)	Woman-owned DBE	534	\$85,399	\$85,399	1.7			
(13)	Minority-owned DBE	645	\$133,660	\$133,660	2.6			
(14)	African American-owned DBE	119	\$11,955	\$11,955	0.2			
(15)	Asian-Pacific American-owned DBE	133	\$24,786	\$24,786	0.5			
(16)	Subcontinent Asian American-owned DBE	17	\$4,672	\$4,672	0.1			
(17)	Hispanic American-owned DBE	123	\$39,423	\$39,423	0.8			
(18)	Native American-owned DBE	253	\$52,824	\$52,824	1.0			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-9.

Agency: WSDOT and Local Programs Funding source: FHWA-funded Time period: FY 2009, 2010 and 2011

Type: Construction

Role: Prime Contractors, Subcontractors and Suppliers

Region: Washington

		(a) Number of contracts (subcontracts)	(b) Dollars in sample	(c) Estimated total dollars	(d) Actual utilization (column c / column c, row1)	(e) Utilization benchmark (availability)	(f) Difference (column d - column e)	(g) Disparity index
Firm Ty	pe	in sample	(thousands)	(thousands)*	%	%	%	(d / e) x 100
(1) A	III firms	7,942	\$4,784,314	\$4,784,314				
(2)	MBE/WBE	2,173	\$538,912	\$538,912	11.3	8.1	3.1	138.7
(3)	WBE	1,204	\$279,963	\$279,963	5.9	2.7	3.1	200+
(4)	MBE	969	\$258,948	\$258,948	5.4	5.4	0.0	100.7
(5)	African American-owned	140	\$63,074	\$63,170	1.3	0.8	0.5	167.3
(6)	Asian-Pacific American-owned	262	\$61,789	\$61,884	1.3	0.5	0.8	200+
(7)	Subcontinent Asian American-owned	4	\$1,084	\$1,086	0.0	0.3	-0.3	6.7
(8)	Hispanic American-owned	216	\$50,907	\$50,985	1.1	1.9	-0.9	55.6
(9)	Native American-owned	321	\$81,699	\$81,824	1.7	1.8	-0.1	95.3
(10)	Unknown MBE	26	\$395					
(11)	DBE-certified	1,105	\$208,804	\$208,804	4.4			
(12)	Woman-owned DBE	494	\$79,729	\$79,729	1.7			
(13)	Minority-owned DBE	611	\$129,076	\$129,076	2.7			
(14)	African American-owned DBE	113	\$11,830	\$11,830	0.2			
(15)	Asian-Pacific American-owned DBE	126	\$24,524	\$24,524	0.5			
(16)	Subcontinent Asian American-owned DBE	2	\$967	\$967	0.0			
(17)	Hispanic American-owned DBE	119	\$39,018	\$39,018	0.8			
(18)	Native American-owned DBE	251	\$52,737	\$52,737	1.1			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	0.0			
(21)	Unknown DBE	0	\$0					

 $Note: Spread sheet \ rounds \ numbers \ to \ nearest \ thous and \ dollars \ or \ tenth \ of \ one \ percent. \ WBE \ is \ white \ women-owned \ firms.$

^{*} 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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-10.

Agency: WSDOT and Local Programs Funding source: FHWA-funded Time period: FY 2009, 2010 and 2011

Type: Engineering

Role: Prime Contractors, Subcontractors and Suppliers

Region: Washington

		(a) Number of contracts (subcontracts)	(b) Dollars in sample	(c) Estimated total dollars	(d) Actual utilization (column c / column c, row1)	(e) Utilization benchmark (availability)	(f) Difference (column d - column e)	(g) Disparity index
Firm Ty	rpe	in sample	(thousands)	(thousands)*	%	%	%	(d / e) x 100
(1) A	III firms	1,379	\$328,038	\$328,038				
(2)	MBE/WBE	220	\$46,350	\$46,350	14.1	13.1	1.0	107.6
(3)	WBE	137	\$29,793	\$29,793	9.1	5.0	4.0	180.4
(4)	MBE	83	\$16,557	\$16,557	5.0	8.1	-3.0	62.4
(5)	African American-owned	7	\$202	\$205	0.1	1.3	-1.2	5.0
(6)	Asian-Pacific American-owned	11	\$534	\$542	0.2	0.8	-0.7	20.2
(7)	Subcontinent Asian American-owned	24	\$8,727	\$8,860	2.7	3.3	-0.6	81.1
(8)	Hispanic American-owned	8	\$450	\$457	0.1	0.6	-0.5	23.6
(9)	Native American-owned	25	\$6,396	\$6,494	2.0	2.1	-0.1	93.9
(10)	Unknown MBE	8	\$248					
(11)	DBE-certified	74	\$10,254	\$10,254	3.1			
(12)	Woman-owned DBE	40	\$5,670	\$5,670	1.7			
(13)	Minority-owned DBE	34	\$4,585	\$4,585	1.4			
(14)	African American-owned DBE	6	\$125	\$125	0.0			
(15)	Asian-Pacific American-owned DBE	7	\$262	\$262	0.1			
(16)	Subcontinent Asian American-owned DBE	15	\$3,705	\$3,705	1.1			
(17)	Hispanic American-owned DBE	4	\$405	\$405	0.1			
(18)	Native American-owned DBE	2	\$87	\$87	0.0			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	0.0			
(21)	Unknown DBE	0	\$0					

 $Note: Spread sheet\ rounds\ numbers\ to\ nearest\ thousand\ dollars\ or\ tenth\ of\ one\ percent.\ WBE\ is\ white\ women-owned\ firms.$

^{*} 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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-11.

Agency: WSDOT and Local Programs Funding source: FHWA-funded

Time period: FY 2009

Type: Construction and Engineering

Role: Prime Contractors, Subcontractors and Suppliers

Region: Washington

		(a) Number of contracts (subcontracts)	(b) Dollars in sample	(c) Estimated total dollars	(d) Actual utilization (column c / column c, row1)	(e) Utilization benchmark (availability)	(f) Difference (column d - column e)	(g) Disparity index
Firm Ty	<i>т</i> ре	in sample	(thousands)	(thousands)*	%	%	%	(d / e) x 100
(1) A	III firms	3,485	\$845,643	\$845,643				
(2)	MBE/WBE	875	\$164,514	\$164,514	19.5	15.8	3.7	123.2
(3)	WBE	463	\$64,308	\$64,308	7.6	5.6	2.0	135.8
(4)	MBE	412	\$100,207	\$100,207	11.8	10.2	1.7	116.3
(5)	African American-owned	48	\$37,574	\$37,674	4.5	1.0	3.5	200+
(6)	Asian-Pacific American-owned	76	\$18,082	\$18,130	2.1	1.1	1.0	192.0
(7)	Subcontinent Asian American-owned	12	\$3,080	\$3,088	0.4	1.0	-0.7	34.8
(8)	Hispanic American-owned	92	\$15,211	\$15,251	1.8	3.7	-1.9	48.1
(9)	Native American-owned	170	\$25,995	\$26,064	3.1	3.3	-0.2	93.3
(10)	Unknown MBE	14	\$264					
(11)	DBE-certified	521	\$83,850	\$83,850	9.9			
(12)	Woman-owned DBE	223	\$35,435	\$35,435	4.2			
(13)	Minority-owned DBE	298	\$48,415	\$48,415	5.7			
(14)	African American-owned DBE	45	\$4,147	\$4,147	0.5			
(15)	Asian-Pacific American-owned DBE	47	\$13,266	\$13,266	1.6			
(16)	Subcontinent Asian American-owned DBE	12	\$3,080	\$3,080	0.4			
(17)	Hispanic American-owned DBE	55	\$9,697	\$9,697	1.1			
(18)	Native American-owned DBE	139	\$18,225	\$18,225	2.2			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	0.0			
(21)	Unknown DBE	0	\$0					

 $Note: Spread sheet \ rounds \ numbers \ to \ nearest \ thous and \ dollars \ or \ tenth \ of \ one \ percent. \ WBE \ is \ white \ women-owned \ firms.$

^{*} 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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-12.

Agency: WSDOT and Local Programs Funding source: FHWA-funded

Time period: FY 2010

Type: Construction and Engineering

Role: Prime Contractors, Subcontractors and Suppliers

Region: Washington

		(a) Number of contracts (subcontracts)	(b) Dollars in sample	(c) Estimated total dollars	(d) Actual utilization (column c / column c, row1)	(e) Utilization benchmark (availability)	(f) Difference (column d - column e)	(g) Disparity index
Firm Ty	<i>г</i> ре	in sample	(thousands)	(thousands)*	%	%	%	(d / e) x 100
(1) A	ll firms	3,376	\$1,637,916	\$1,637,916				
(2)	MBE/WBE	828	\$236,707	\$236,707	14.5	11.3	3.2	128.3
(3)	WBE	477	\$124,122	\$124,122	7.6	3.9	3.6	191.9
(4)	MBE	351	\$112,585	\$112,585	6.9	7.3	-0.4	94.0
(5)	African American-owned	54	\$18,093	\$18,120	1.1	1.1	0.0	101.8
(6)	Asian-Pacific American-owned	118	\$20,906	\$20,936	1.3	0.7	0.6	183.7
(7)	Subcontinent Asian American-owned	10	\$3,816	\$3,821	0.2	0.7	-0.5	33.8
(8)	Hispanic American-owned	75	\$20,594	\$20,624	1.3	2.3	-1.1	54.2
(9)	Native American-owned	85	\$49,012	\$49,084	3.0	2.5	0.5	119.1
(10)	Unknown MBE	9	\$164					
(11)	DBE-certified	345	\$84,092	\$84,092	5.1			
(12)	Woman-owned DBE	163	\$29,352	\$29,352	1.8			
(13)	Minority-owned DBE	182	\$54,741	\$54,741	3.3			
(14)	African American-owned DBE	43	\$6,214	\$6,214	0.4			
(15)	Asian-Pacific American-owned DBE	44	\$5,155	\$5,155	0.3			
(16)	Subcontinent Asian American-owned DBE	3	\$625	\$625	0.0			
(17)	Hispanic American-owned DBE	34	\$16,101	\$16,101	1.0			
(18)	Native American-owned DBE	58	\$26,645	\$26,645	1.6			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	0.0			
(21)	Unknown DBE	0	\$0					

 $Note: Spread sheet\ rounds\ numbers\ to\ nearest\ thousand\ dollars\ or\ tenth\ of\ one\ percent.\ WBE\ is\ white\ women-owned\ firms.$

^{*} 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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-13.

Agency: WSDOT and Local Programs Funding source: FHWA-funded

Time period: FY 2011

Type: Construction and Engineering

Role: Prime Contractors, Subcontractors and Suppliers

Region: Washington

Firm T	ype	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (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) A	All firms	2,460	\$2,628,794	\$2,628,794				
(2)	MBE/WBE	690	\$184,041	\$184,041	7.0	4.3	2.7	162.0
(3)	WBE	401	\$121,327	\$121,327	4.6	1.4	3.2	200+
(4)	MBE	289	\$62,714	\$62,714	2.4	3.0	-0.6	80.7
(5)	African American-owned	45	\$7,608	\$7,634	0.3	0.6	-0.3	48.2
(6)	Asian-Pacific American-owned	79	\$23,335	\$23,415	0.9	0.3	0.6	200+
(7)	Subcontinent Asian American-owned	6	\$2,915	\$2,925	0.1	0.3	-0.2	41.8
(8)	Hispanic American-owned	57	\$15,553	\$15,606	0.6	0.9	-0.3	65.4
(9)	Native American-owned	91	\$13,088	\$13,133	0.5	0.9	-0.4	55.5
(10)	Unknown MBE	11	\$214					
(11)	DBE-certified	313	\$51,117	\$51,117	1.9			
(12)	Woman-owned DBE	148	\$20,612	\$20,612	0.8			
(13)	Minority-owned DBE	165	\$30,505	\$30,505	1.2			
(14)	African American-owned DBE	31	\$1,594	\$1,594	0.1			
(15)	Asian-Pacific American-owned DBE	42	\$6,365	\$6,365	0.2			
(16)	Subcontinent Asian American-owned DBE	2	\$967	\$967	0.0			
(17)	Hispanic American-owned DBE	34	\$13,625	\$13,625	0.5			
(18)	Native American-owned DBE	56	\$7,954	\$7,954	0.3			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	0.0			
(21)	Unknown DBE	0	\$0					

 $Note: Spread sheet \ rounds \ numbers \ to \ nearest \ thousand \ dollars \ or \ tenth \ of \ one \ percent. \ WBE \ is \ white \ women-owned \ firms.$

^{*} 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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-14.

Agency: WSDOT and Local Programs
Funding source: State-funded
Time period: FY 2009, 2010 and 2011

Type: Construction and Engineering

Role: Prime Contractors, Subcontractors and Suppliers

Region: Washington

Firm T	уре	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (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	2,064	\$1,174,869	\$1,174,869				
(2)	MBE/WBE	346	\$151,071	\$151,071	12.9	9.8	3.1	131.8
(3)	WBE	199	\$96,970	\$96,970	8.3	2.7	5.6	200+
(4)	MBE	147	\$54,101	\$54,101	4.6	7.1	-2.5	65.1
(5)	African American-owned	21	\$23,331	\$23,448	2.0	1.5	0.5	132.0
(6)	Asian-Pacific American-owned	34	\$3,446	\$3,463	0.3	0.9	-0.6	32.8
(7)	Subcontinent Asian American-owned	5	\$55	\$55	0.0	0.7	-0.7	0.6
(8)	Hispanic American-owned	31	\$9,968	\$10,017	0.9	2.0	-1.1	42.9
(9)	Native American-owned	47	\$17,032	\$17,117	1.5	1.9	-0.5	75.7
(10)	Unknown MBE	9	\$270					
(11)	DBE-certified	130	\$23,545	\$23,545	2.0			
(12)	Woman-owned DBE	74	\$15,171	\$15,171	1.3			
(13)	Minority-owned DBE	56	\$8,374	\$8,374	0.7			
(14)	African American-owned DBE	9	\$646	\$646	0.1			
(15)	Asian-Pacific American-owned DBE	8	\$1,125	\$1,125	0.1			
(16)	Subcontinent Asian American-owned DBE	4	\$52	\$52	0.0			
(17)	Hispanic American-owned DBE	7	\$3,159	\$3,159	0.3			
(18)	Native American-owned DBE	28	\$3,392	\$3,392	0.3			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	0.0			
(21)	Unknown DBE	0	\$0					

 $Note: Spread sheet \ rounds \ numbers \ to \ nearest \ thousand \ dollars \ or \ tenth \ of \ one \ percent. \ WBE \ is \ white \ women-owned \ firms.$

^{*} 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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-15.

Agency: WSDOT and Local Programs Funding source: State-funded Time period: FY 2009, 2010 and 2011

Type: Construction

Role: Prime Contractors, Subcontractors and Suppliers

Region: Washington

Firm Ty	ine.	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (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	70	(u / c / x 100
, ,	ll firms	1,146	\$1,008,487	\$1,008,487				
(2)	MBE/WBE	262	\$136,140	\$136,140	13.5	9.2	4.3	146.2
(3)	WBE	148	\$83,491	\$83,491	8.3	2.4	5.9	200+
(4)	MBE	114	\$52,649	\$52,649	5.2	6.8	-1.6	76.5
(5)	African American-owned	20	\$23,221	\$23,299	2.3	1.6	0.8	148.8
(6)	Asian-Pacific American-owned	26	\$2,701	\$2,710	0.3	0.9	-0.6	30.5
(7)	Subcontinent Asian American-owned	0	\$0	\$0	0.0	0.3	-0.3	0.0
(8)	Hispanic American-owned	26	\$9,783	\$9,816	1.0	2.2	-1.2	44.1
(9)	Native American-owned	37	\$16,767	\$16,824	1.7	1.9	-0.2	89.9
(10)	Unknown MBE	5	\$176					
(11)	DBE-certified	99	\$20,890	\$20,890	2.1			
(12)	Woman-owned DBE	54	\$12,872	\$12,872	1.3			
(13)	Minority-owned DBE	45	\$8,019	\$8,019	0.8			
(14)	African American-owned DBE	8	\$536	\$536	0.1			
(15)	Asian-Pacific American-owned DBE	7	\$1,121	\$1,121	0.1			
(16)	Subcontinent Asian American-owned DBE	0	\$0	\$0	0.0			
(17)	Hispanic American-owned DBE	6	\$3,059	\$3,059	0.3			
(18)	Native American-owned DBE	24	\$3,303	\$3,303	0.3			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-16.

Agency: WSDOT and Local Programs Funding source: State-funded Time period: FY 2009, 2010 and 2011

Type: Engineering

Role: Prime Contractors, Subcontractors and Suppliers

Region: Washington

Firm T	ype	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (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	918	\$166,382	\$166,382				
(2)	MBE/WBE	84	\$14,931	\$14,931	9.0	12.9	-3.9	69.5
(3)	WBE	51	\$13,479	\$13,479	8.1	4.3	3.8	187.9
(4)	MBE	33	\$1,452	\$1,452	0.9	8.6	-7.7	10.2
(5)	African American-owned	1	\$111	\$118	0.1	1.3	-1.2	5.6
(6)	Asian-Pacific American-owned	8	\$745	\$796	0.5	1.0	-0.5	47.5
(7)	Subcontinent Asian American-owned	5	\$55	\$58	0.0	3.3	-3.3	1.1
(8)	Hispanic American-owned	5	\$184	\$197	0.1	0.7	-0.6	17.5
(9)	Native American-owned	10	\$264	\$283	0.2	2.3	-2.2	7.2
(10)	Unknown MBE	4	\$94					
(11)	DBE-certified	31	\$2,655	\$2,655	1.6			
(12)	Woman-owned DBE	20	\$2,300	\$2,300	1.4			
(13)	Minority-owned DBE	11	\$356	\$356	0.2			
(14)	African American-owned DBE	1	\$111	\$111	0.1			
(15)	Asian-Pacific American-owned DBE	1	\$4	\$4	0.0			
(16)	Subcontinent Asian American-owned DBE	4	\$52	\$52	0.0			
(17)	Hispanic American-owned DBE	1	\$100	\$100	0.1			
(18)	Native American-owned DBE	4	\$89	\$89	0.1			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	0.0			
(21)	Unknown DBE	0	\$0					

 $Note: Spread sheet\ rounds\ numbers\ to\ nearest\ thousand\ dollars\ or\ tenth\ of\ one\ percent.\ WBE\ is\ white\ women-owned\ firms.$

^{*} 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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-17.

Agency: WSDOT and Local Programs

Funding source: State-funded

Time period: FY 2009

Type: Construction and Engineering

Role: Prime Contractors, Subcontractors and Suppliers

Region: Washington

		(a) Number of contracts (subcontracts)	(b) Dollars in sample	(c) Estimated total dollars	(d) Actual utilization (column c / column c, row1)	(e) Utilization benchmark (availability)	(f) Difference (column d - column e)	(g) Disparity index
Firm Ty	pe	in sample	(thousands)	(thousands)*	%	%	%	(d / e) x 100
(1) A	ll firms	759	\$545,787	\$545,787				
(2)	MBE/WBE	141	\$85,152	\$85,152	15.6	9.2	6.4	170.1
(3)	WBE	75	\$45,988	\$45,988	8.4	2.6	5.8	200+
(4)	MBE	66	\$39,164	\$39,164	7.2	6.6	0.6	109.1
(5)	African American-owned	11	\$19,534	\$19,611	3.6	1.2	2.4	200+
(6)	Asian-Pacific American-owned	18	\$1,993	\$2,001	0.4	0.8	-0.4	47.3
(7)	Subcontinent Asian American-owned	1	\$38	\$38	0.0	0.6	-0.6	1.2
(8)	Hispanic American-owned	12	\$5,477	\$5,499	1.0	2.1	-1.1	48.1
(9)	Native American-owned	20	\$11,967	\$12,015	2.2	1.9	0.3	114.3
(10)	Unknown MBE	4	\$154					
(11)	DBE-certified	70	\$15,144	\$15,144	2.8			
(12)	Woman-owned DBE	38	\$9,431	\$9,431	1.7			
(13)	Minority-owned DBE	32	\$5,713	\$5,713	1.0			
(14)	African American-owned DBE	4	\$173	\$173	0.0			
(15)	Asian-Pacific American-owned DBE	6	\$677	\$677	0.1			
(16)	Subcontinent Asian American-owned DBE	1	\$38	\$38	0.0			
(17)	Hispanic American-owned DBE	6	\$3,059	\$3,059	0.6			
(18)	Native American-owned DBE	15	\$1,766	\$1,766	0.3			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	0.0			
(21)	Unknown DBE	0	\$0					

 $Note: Spread sheet\ rounds\ numbers\ to\ nearest\ thousand\ dollars\ or\ tenth\ of\ one\ percent.\ WBE\ is\ white\ women-owned\ firms.$

^{*} 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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-18.

Agency: WSDOT and Local Programs Funding source: State-funded

Time period: FY 2010

Type: Construction and Engineering

Role: Prime Contractors, Subcontractors and Suppliers

Region: Washington

Firm T	ype	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (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	507	\$104,628	\$104,628				
(2)	MBE/WBE	59	\$10,879	\$10,879	10.4	13.9	-3.5	74.8
(3)	WBE	40	\$9,824	\$9,824	9.4	4.9	4.4	190.0
(4)	MBE	19	\$1,055	\$1,055	1.0	9.0	-7.9	11.3
(5)	African American-owned	3	\$355	\$388	0.4	1.0	-0.6	37.4
(6)	Asian-Pacific American-owned	4	\$359	\$393	0.4	1.1	-0.7	33.4
(7)	Subcontinent Asian American-owned	2	\$5	\$6	0.0	3.2	-3.2	0.2
(8)	Hispanic American-owned	2	\$48	\$52	0.1	1.4	-1.4	3.5
(9)	Native American-owned	5	\$197	\$215	0.2	2.2	-2.0	9.3
(10)	Unknown MBE	3	\$92					
(11)	DBE-certified	18	\$1,095	\$1,095	1.0			
(12)	Woman-owned DBE	14	\$726	\$726	0.7			
(13)	Minority-owned DBE	4	\$369	\$369	0.4			
(14)	African American-owned DBE	2	\$352	\$352	0.3			
(15)	Asian-Pacific American-owned DBE	0	\$0	\$0	0.0			
(16)	Subcontinent Asian American-owned DBE	1	\$3	\$3	0.0			
(17)	Hispanic American-owned DBE	0	\$0	\$0	0.0			
(18)	Native American-owned DBE	1	\$15	\$15	0.0			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	0.0			
(21)	Unknown DBE	0	\$0					

 $Note: Spread sheet \ rounds \ numbers \ to \ nearest \ thous and \ dollars \ or \ tenth \ of \ one \ percent. \ WBE \ is \ white \ women-owned \ firms.$

^{*} 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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-19.

Agency: WSDOT and Local Programs Funding source: State-funded

Time period: FY 2011

Type: Construction and Engineering

Role: Prime Contractors, Subcontractors and Suppliers

Region: Washington

Firm T	ype	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (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	798	\$524,454	\$524,454				
(2)	MBE/WBE	146	\$55,040	\$55,040	10.5	9.5	1.0	110.1
(3)	WBE	84	\$41,158	\$41,158	7.8	2.3	5.5	200+
(4)	MBE	62	\$13,882	\$13,882	2.6	7.2	-4.6	36.7
(5)	African American-owned	7	\$3,443	\$3,449	0.7	1.9	-1.3	34.0
(6)	Asian-Pacific American-owned	12	\$1,093	\$1,095	0.2	1.0	-0.8	21.2
(7)	Subcontinent Asian American-owned	2	\$11	\$11	0.0	0.4	-0.4	0.5
(8)	Hispanic American-owned	17	\$4,442	\$4,450	0.8	2.0	-1.1	42.7
(9)	Native American-owned	22	\$4,868	\$4,876	0.9	1.9	-0.9	49.7
(10)	Unknown MBE	2	\$24					
(11)	DBE-certified	42	\$7,307	\$7,307	1.4			
(12)	Woman-owned DBE	22	\$5,015	\$5,015	1.0			
(13)	Minority-owned DBE	20	\$2,292	\$2,292	0.4			
(14)	African American-owned DBE	3	\$122	\$122	0.0			
(15)	Asian-Pacific American-owned DBE	2	\$448	\$448	0.1			
(16)	Subcontinent Asian American-owned DBE	2	\$11	\$11	0.0			
(17)	Hispanic American-owned DBE	1	\$100	\$100	0.0			
(18)	Native American-owned DBE	12	\$1,611	\$1,611	0.3			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	0.0			
(21)	Unknown DBE	0	\$0					

 $Note: Spread sheet \ rounds \ numbers \ to \ nearest \ thous and \ dollars \ or \ tenth \ of \ one \ percent. \ WBE \ is \ white \ women-owned \ firms.$

^{*} 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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-20.

Agency: WSDOT and Local Programs
Funding source: FHWA- and State-funded

Time period: FY 2009, 2010, 2011

Type: Construction and Engineering

Role: Prime Contractors, Subcontractors and Suppliers

Region: Northwestern Washington

Firm Ty	ype	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (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) A	All firms	7,601	\$4,939,513	\$4,939,513				
(2)	MBE/WBE	1,884	\$538,875	\$538,875	10.9	7.2	3.7	150.9
(3)	WBE	995	\$275,974	\$275,974	5.6	2.4	3.2	200+
(4)	МВЕ	889	\$262,901	\$262,901	5.3	4.8	0.5	110.3
(5)	African American-owned	140	\$85,352	\$85,532	1.7	0.9	0.8	192.4
(6)	Asian-Pacific American-owned	244	\$48,957	\$49,060	1.0	0.5	0.5	200+
(7)	Subcontinent Asian American-owned	31	\$9,849	\$9,870	0.2	0.5	-0.3	39.2
(8)	Hispanic American-owned	192	\$47,275	\$47,375	1.0	1.5	-0.5	63.6
(9)	Native American-owned	258	\$70,916	\$71,065	1.4	1.4	0.0	100.9
(10)	Unknown MBE	24	\$551					
(11)	DBE-certified	932	\$185,945	\$185,945	3.8			
(12)	Woman-owned DBE	392	\$68,336	\$68,336	1.4			
(13)	Minority-owned DBE	540	\$117,609	\$117,609	2.4			
(14)	African American-owned DBE	112	\$11,688	\$11,688	0.2			
(15)	Asian-Pacific American-owned DBE	115	\$20,786	\$20,786	0.4			
(16)	Subcontinent Asian American-owned DBE	20	\$4,715	\$4,715	0.1			
(17)	Hispanic American-owned DBE	96	\$35,570	\$35,570	0.7			
(18)	Native American-owned DBE	197	\$44,850	\$44,850	0.9			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	0.0			
(21)	Unknown DBE	0	\$0					

 $Note: Spread sheet \ rounds \ numbers \ to \ nearest \ thousand \ dollars \ or \ tenth \ of \ one \ percent. \ WBE \ is \ white \ women-owned \ firms.$

^{*} 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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-21.
Agency: WSDOT and Local Programs
Funding source: FHWA- and State-funded
Time period: FY 2009, 2010, 2011

Type: Construction and Engineering

Role: Prime Contractors, Subcontractors and Suppliers

Region: Eastern Washington

		(a) Number of contracts (subcontracts)	(b) Dollars in sample	(c) Estimated total dollars	(d) Actual utilization (column c / column c, row1)	(e) Utilization benchmark (availability)	(f) Difference (column d - column e)	(g) Disparity index
Firm Ty	pe	in sample	(thousands)	(thousands)*	%	%	%	(d / e) x 100
(1) A	ll firms	1,406	\$437,299	\$437,299				
(2)	MBE/WBE	322	\$53,303	\$53,303	12.2	15.4	-3.2	79.3
(3)	WBE	223	\$38,498	\$38,498	8.8	5.4	3.4	162.3
(4)	MBE	99	\$14,806	\$14,806	3.4	9.9	-6.6	34.1
(5)	African American-owned	4	\$230	\$233	0.1	0.5	-0.5	10.1
(6)	Asian-Pacific American-owned	24	\$4,426	\$4,485	1.0	1.6	-0.5	65.2
(7)	Subcontinent Asian American-owned	0	\$0	\$0	0.0	0.7	-0.7	0.0
(8)	Hispanic American-owned	14	\$4,004	\$4,057	0.9	3.5	-2.5	26.8
(9)	Native American-owned	48	\$5,952	\$6,030	1.4	3.7	-2.3	37.3
(10)	Unknown MBE	9	\$193					
(11)	DBE-certified	169	\$22,635	\$22,635	5.2			
(12)	Woman-owned DBE	112	\$15,111	\$15,111	3.5			
(13)	Minority-owned DBE	57	\$7,523	\$7,523	1.7			
(14)	African American-owned DBE	2	\$46	\$46	0.0			
(15)	Asian-Pacific American-owned DBE	7	\$617	\$617	0.1			
(16)	Subcontinent Asian American-owned DBE	0	\$0	\$0	0.0			
(17)	Hispanic American-owned DBE	10	\$2,971	\$2,971	0.7			
(18)	Native American-owned DBE	38	\$3,889	\$3,889	0.9			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-22.
Agency: WSDOT and Local Programs
Funding source: FHWA- and State-funded
Time period: FY 2009, 2010, 2011

Type: Construction and Engineering

Role: Prime Contractors, Subcontractors and Suppliers

Region: Southern Washington

		(a) Number of contracts (subcontracts)	(b) Dollars in sample	(c) Estimated total dollars	(d) Actual utilization (column c / column c, row1)	(e) Utilization benchmark (availability)	(f) Difference (column d - column e)	(g) Disparity index
Firm Ty	pe	in sample	(thousands)	(thousands)*	%	%	%	(d / e) x 100
(1) A	II firms	2,378	\$910,410	\$910,410				
(2)	MBE/WBE	533	\$144,154	\$144,154	15.8	13.4	2.5	118.3
(3)	WBE	322	\$92,255	\$92,255	10.1	4.0	6.1	200+
(4)	MBE	211	\$51,900	\$51,900	5.7	9.3	-3.6	61.1
(5)	African American-owned	24	\$1,025	\$1,028	0.1	1.4	-1.3	8.0
(6)	Asian-Pacific American-owned	39	\$12,385	\$12,425	1.4	0.9	0.5	152.9
(7)	Subcontinent Asian American-owned	2	\$17	\$17	0.0	0.9	-0.9	0.2
(8)	Hispanic American-owned	49	\$10,045	\$10,078	1.1	3.0	-1.9	36.8
(9)	Native American-owned	87	\$28,259	\$28,351	3.1	3.2	-0.1	98.4
(10)	Unknown MBE	10	\$167					
(11)	DBE-certified	208	\$34,024	\$34,024	3.7			
(12)	Woman-owned DBE	104	\$17,122	\$17,122	1.9			
(13)	Minority-owned DBE	104	\$16,902	\$16,902	1.9			
(14)	African American-owned DBE	14	\$867	\$867	0.1			
(15)	Asian-Pacific American-owned DBE	19	\$4,508	\$4,508	0.5			
(16)	Subcontinent Asian American-owned DBE	1	\$9	\$9	0.0			
(17)	Hispanic American-owned DBE	24	\$4,041	\$4,041	0.4			
(18)	Native American-owned DBE	46	\$7,477	\$7,477	0.8			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	0.0			
(21)	Unknown DBE	0	\$0					

 $Note: Spread sheet\ rounds\ numbers\ to\ nearest\ thousand\ dollars\ or\ tenth\ of\ one\ percent.\ WBE\ is\ white\ women-owned\ firms.$

^{*} 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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-23.
Agency: WSDOT

Funding source: FHWA- and State-funded

Time period: FY 2009, 2010, 2011

Type: Construction and Engineering

Role: Prime Contractors, Subcontractors and Suppliers

Region: Washington

Firm T	уре	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (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	6,616	\$5,264,651	\$5,264,651				
(2)	MBE/WBE	1,588	\$526,430	\$526,430	10.0	7.3	2.7	136.9
(3)	WBE	935	\$310,462	\$310,462	5.9	2.2	3.7	200+
(4)	MBE	653	\$215,968	\$215,968	4.1	5.1	-1.0	79.9
(5)	African American-owned	101	\$74,815	\$74,998	1.4	0.9	0.5	153.7
(6)	Asian-Pacific American-owned	192	\$43,246	\$43,352	0.8	0.6	0.3	146.9
(7)	Subcontinent Asian American-owned	9	\$520	\$522	0.0	0.5	-0.5	2.0
(8)	Hispanic American-owned	126	\$43,429	\$43,535	0.8	1.6	-0.8	52.3
(9)	Native American-owned	204	\$53,429	\$53,560	1.0	1.6	-0.6	64.8
(10)	Unknown MBE	21	\$528					
(11)	DBE-certified	730	\$145,814	\$145,814	2.8			
(12)	Woman-owned DBE	382	\$66,609	\$66,609	1.3			
(13)	Minority-owned DBE	348	\$79,206	\$79,206	1.5			
(14)	African American-owned DBE	69	\$7,430	\$7,430	0.1			
(15)	Asian-Pacific American-owned DBE	78	\$16,590	\$16,590	0.3			
(16)	Subcontinent Asian American-owned DBE	5	\$340	\$340	0.0			
(17)	Hispanic American-owned DBE	50	\$28,292	\$28,292	0.5			
(18)	Native American-owned DBE	146	\$26,554	\$26,554	0.5			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	0.0			
(21)	Unknown DBE	0	\$0					

 $Note: Spread sheet\ rounds\ numbers\ to\ nearest\ thousand\ dollars\ or\ tenth\ of\ one\ percent.\ WBE\ is\ white\ women-owned\ firms.$

^{*} 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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-24.

Agency: Local Programs

Funding source: FHWA- and State-funded

Time period: FY 2009, 2010, 2011

Type: Construction and Engineering

Role: Prime Contractors, Subcontractors and Suppliers

Region: Washington

		(a) Number of contracts (subcontracts)	(b) Dollars in sample	(c) Estimated total dollars	(d) Actual utilization (column c / column c, row1)	(e) Utilization benchmark (availability)	(f) Difference (column d - column e)	(g) Disparity index
Firm Ty	<i>г</i> ре	in sample	(thousands)	(thousands)*	%	%	%	(d / e) x 100
(1) A	ll firms	4,769	\$1,022,571	\$1,022,571				
(2)	MBE/WBE	1,151	\$209,903	\$209,903	20.5	15.8	4.7	129.9
(3)	WBE	605	\$96,264	\$96,264	9.4	6.4	3.0	147.6
(4)	MBE	546	\$113,639	\$113,639	11.1	9.4	1.7	118.0
(5)	African American-owned	67	\$11,792	\$11,832	1.2	1.1	0.1	109.2
(6)	Asian-Pacific American-owned	115	\$22,523	\$22,600	2.2	0.9	1.3	200+
(7)	Subcontinent Asian American-owned	24	\$9,346	\$9,377	0.9	0.9	0.0	96.8
(8)	Hispanic American-owned	129	\$17,896	\$17,957	1.8	3.3	-1.5	53.2
(9)	Native American-owned	189	\$51,698	\$51,873	5.1	3.2	1.9	158.0
(10)	Unknown MBE	22	\$384					
(11)	DBE-certified	579	\$96,790	\$96,790	9.5			
(12)	Woman-owned DBE	226	\$33,961	\$33,961	3.3			
(13)	Minority-owned DBE	353	\$62,829	\$62,829	6.1			
(14)	African American-owned DBE	59	\$5,171	\$5,171	0.5			
(15)	Asian-Pacific American-owned DBE	63	\$9,321	\$9,321	0.9			
(16)	Subcontinent Asian American-owned DBE	16	\$4,385	\$4,385	0.4			
(17)	Hispanic American-owned DBE	80	\$14,290	\$14,290	1.4			
(18)	Native American-owned DBE	135	\$29,662	\$29,662	2.9			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-25.

Agency: WSDOT and Local Programs
Funding source: FHWA- and State-funded
Time period: FY 2009, 2010, 2011
Type: Construction and Engineering

Role: Prime Contractors

Region: Washington

		(a) Number of contracts (subcontracts)	(b) Dollars in sample	(c) Estimated total dollars	(d) Actual utilization (column c / column c, row1)	(e) Utilization benchmark (availability)	(f) Difference (column d - column e)	(g) Disparity index
Firm T	уре	in sample	(thousands)	(thousands)*	%	%	%	(d / e) x 100
(1)	All firms	2,269	\$4,405,184	\$4,405,184				
(2)	MBE/WBE	215	\$140,719	\$140,719	3.2	4.9	-1.7	65.6
(3)	WBE	116	\$43,128	\$43,128	1.0	1.3	-0.3	76.4
(4)	MBE	99	\$97,591	\$97,591	2.2	3.6	-1.4	61.8
(5)	African American-owned	6	\$36,474	\$36,486	0.8	0.1	0.7	200+
(6)	Asian-Pacific American-owned	13	\$4,378	\$4,379	0.1	0.4	-0.3	25.9
(7)	Subcontinent Asian American-owned	14	\$6,951	\$6,953	0.2	0.4	-0.2	42.5
(8)	Hispanic American-owned	14	\$3,477	\$3,478	0.1	1.4	-1.3	5.8
(9)	Native American-owned	50	\$46,280	\$46,295	1.1	1.4	-0.3	76.8
(10)	Unknown MBE	2	\$32					
(11)	DBE-certified	67	\$29,943	\$29,943	0.7			
(12)	Woman-owned DBE	35	\$4,079	\$4,079	0.1			
(13)	Minority-owned DBE	32	\$25,864	\$25,864	0.6			
(14)	African American-owned DBE	0	\$0	\$0	0.0			
(15)	Asian-Pacific American-owned DBE	7	\$2,378	\$2,378	0.1			
(16)	Subcontinent Asian American-owned DBE	8	\$2,580	\$2,580	0.1			
(17)	Hispanic American-owned DBE	6	\$1,898	\$1,898	0.0			
(18)	Native American-owned DBE	11	\$19,009	\$19,009	0.4			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-26.

Agency: WSDOT and Local Programs
Funding source: FHWA- and State-funded

Time period: FY 2009, 2010, 2011

Type: Construction
Role: Prime Contractors
Region: Washington

Firm T	/ne	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (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	948	\$4,065,646	\$4,065,646	,,	70	,,	(u / c / x 100
					2.7	4.4	17	60.7
(2)	MBE/WBE	74	\$108,404	\$108,404	2.7	4.4	-1.7	60.7
(3)	WBE	35	\$24,847	\$24,847	0.6	1.1	-0.5	54.4
(4)	MBE	39	\$83,556	\$83,556	2.1	3.3	-1.2	62.8
(5)	African American-owned	6	\$36,474	\$36,474	0.9	0.0	0.9	200+
(6)	Asian-Pacific American-owned	7	\$4,260	\$4,260	0.1	0.4	-0.2	29.8
(7)	Subcontinent Asian American-owned	0	\$0	\$0	0.0	0.2	-0.2	0.0
(8)	Hispanic American-owned	5	\$2,990	\$2,990	0.1	1.4	-1.4	5.1
(9)	Native American-owned	21	\$39,832	\$39,832	1.0	1.3	-0.3	75.5
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	20	\$24,360	\$24,360	0.6			
(12)	Woman-owned DBE	5	\$1,621	\$1,621	0.0			
(13)	Minority-owned DBE	15	\$22,739	\$22,739	0.6			
(14)	African American-owned DBE	0	\$0	\$0	0.0			
(15)	Asian-Pacific American-owned DBE	4	\$2,305	\$2,305	0.1			
(16)	Subcontinent Asian American-owned DBE	0	\$0	\$0	0.0			
(17)	Hispanic American-owned DBE	3	\$1,527	\$1,527	0.0			
(18)	Native American-owned DBE	8	\$18,907	\$18,907	0.5			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-27.

Type: Engineering
Role: Prime Contractors
Region: Washington

Firm Ty	/ре	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (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) A	ull firms	1,321	\$339,538	\$339,538				
(2)	MBE/WBE	141	\$32,316	\$32,316	9.5	10.6	-1.0	90.1
(3)	WBE	81	\$18,281	\$18,281	5.4	3.2	2.2	168.8
(4)	MBE	60	\$14,035	\$14,035	4.1	7.4	-3.2	56.1
(5)	African American-owned	0	\$0	\$0	0.0	1.1	-1.1	0.0
(6)	Asian-Pacific American-owned	6	\$118	\$118	0.0	0.8	-0.7	4.5
(7)	Subcontinent Asian American-owned	14	\$6,951	\$6,967	2.1	2.7	-0.7	75.3
(8)	Hispanic American-owned	9	\$487	\$488	0.1	0.6	-0.4	25.1
(9)	Native American-owned	29	\$6,448	\$6,462	1.9	2.2	-0.3	86.2
(10)	Unknown MBE	2	\$32					
(11)	DBE-certified	47	\$5,584	\$5,584	1.6			
(12)	Woman-owned DBE	30	\$2,458	\$2,458	0.7			
(13)	Minority-owned DBE	17	\$3,125	\$3,125	0.9			
(14)	African American-owned DBE	0	\$0	\$0	0.0			
(15)	Asian-Pacific American-owned DBE	3	\$72	\$72	0.0			
(16)	Subcontinent Asian American-owned DBE	8	\$2,580	\$2,580	0.8			
(17)	Hispanic American-owned DBE	3	\$371	\$371	0.1			
(18)	Native American-owned DBE	3	\$102	\$102	0.0			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-28.

Type: Construction and Engineering Role: Subcontractors and Suppliers

Region: Washington

Firm T	ype	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (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) A	All firms	9,116	\$1,882,038	\$1,882,038				
(2)	MBE/WBE	2,524	\$595,614	\$595,614	31.6	17.6	14.0	179.6
(3)	WBE	1,424	\$363,598	\$363,598	19.3	6.5	12.8	200+
(4)	MBE	1,100	\$232,016	\$232,016	12.3	11.1	1.2	111.2
(5)	African American-owned	162	\$50,133	\$50,324	2.7	2.9	-0.3	90.9
(6)	Asian-Pacific American-owned	294	\$61,392	\$61,625	3.3	1.2	2.1	200+
(7)	Subcontinent Asian American-owned	19	\$2,915	\$2,926	0.2	1.0	-0.9	14.9
(8)	Hispanic American-owned	241	\$57,848	\$58,068	3.1	3.0	0.1	102.4
(9)	Native American-owned	343	\$58,848	\$59,072	3.1	2.9	0.2	107.1
(10)	Unknown MBE	41	\$880					
(11)	DBE-certified	1,242	\$212,661	\$212,661	11.3			
(12)	Woman-owned DBE	573	\$96,491	\$96,491	5.1			
(13)	Minority-owned DBE	669	\$116,170	\$116,170	6.2			
(14)	African American-owned DBE	128	\$12,601	\$12,601	0.7			
(15)	Asian-Pacific American-owned DBE	134	\$23,533	\$23,533	1.3			
(16)	Subcontinent Asian American-owned DBE	13	\$2,145	\$2,145	0.1			
(17)	Hispanic American-owned DBE	124	\$40,684	\$40,684	2.2			
(18)	Native American-owned DBE	270	\$37,207	\$37,207	2.0			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	0.0			
(21)	Unknown DBE	0	\$0					

 $Note: Spread sheet\ rounds\ numbers\ to\ nearest\ thousand\ dollars\ or\ tenth\ of\ one\ percent.\ WBE\ is\ white\ women-owned\ firms.$

^{*} 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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-29.

Type: Construction

Role: Subcontractors and Suppliers

Region: Washington

Firm T	ype	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (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) A	All firms	8,140	\$1,727,155	\$1,727,155				
(2)	MBE/WBE	2,361	\$566,648	\$566,648	32.8	17.5	15.3	187.0
(3)	WBE	1,317	\$338,607	\$338,607	19.6	6.4	13.2	200+
(4)	MBE	1,044	\$228,041	\$228,041	13.2	11.2	2.0	118.2
(5)	African American-owned	154	\$49,821	\$49,946	2.9	3.1	-0.2	94.4
(6)	Asian-Pacific American-owned	281	\$60,230	\$60,381	3.5	1.2	2.3	200+
(7)	Subcontinent Asian American-owned	4	\$1,084	\$1,087	0.1	0.7	-0.7	8.7
(8)	Hispanic American-owned	237	\$57,701	\$57,845	3.3	3.2	0.1	104.0
(9)	Native American-owned	337	\$58,634	\$58,782	3.4	3.0	0.4	113.4
(10)	Unknown MBE	31	\$571					
(11)	DBE-certified	1,184	\$205,335	\$205,335	11.9			
(12)	Woman-owned DBE	543	\$90,979	\$90,979	5.3			
(13)	Minority-owned DBE	641	\$114,355	\$114,355	6.6			
(14)	African American-owned DBE	121	\$12,366	\$12,366	0.7			
(15)	Asian-Pacific American-owned DBE	129	\$23,340	\$23,340	1.4			
(16)	Subcontinent Asian American-owned DBE	2	\$967	\$967	0.1			
(17)	Hispanic American-owned DBE	122	\$40,550	\$40,550	2.3			
(18)	Native American-owned DBE	267	\$37,133	\$37,133	2.1			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	0.0			
(21)	Unknown DBE	0	\$0					

 $Note: Spread sheet \ rounds \ numbers \ to \ nearest \ thousand \ dollars \ or \ tenth \ of \ one \ percent. \ WBE \ is \ white \ women-owned \ firms.$

^{*} 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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-30.

Type: Engineering

Role: Subcontractors and Suppliers

Region: Washington

Firm T	ype	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (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	976	\$154,883	\$154,883				
(2)	MBE/WBE	163	\$28,965	\$28,965	18.7	18.5	0.2	101.0
(3)	WBE	107	\$24,991	\$24,991	16.1	8.3	7.8	194.4
(4)	МВЕ	56	\$3,974	\$3,974	2.6	10.2	-7.6	25.1
(5)	African American-owned	8	\$313	\$339	0.2	1.6	-1.4	13.7
(6)	Asian-Pacific American-owned	13	\$1,161	\$1,259	0.8	1.1	-0.3	72.0
(7)	Subcontinent Asian American-owned	15	\$1,831	\$1,985	1.3	4.6	-3.3	27.7
(8)	Hispanic American-owned	4	\$147	\$160	0.1	0.7	-0.6	14.3
(9)	Native American-owned	6	\$213	\$231	0.1	2.1	-2.0	6.9
(10)	Unknown MBE	10	\$309					
(11)	DBE-certified	58	\$7,326	\$7,326	4.7			
(12)	Woman-owned DBE	30	\$5,511	\$5,511	3.6			
(13)	Minority-owned DBE	28	\$1,815	\$1,815	1.2			
(14)	African American-owned DBE	7	\$235	\$235	0.2			
(15)	Asian-Pacific American-owned DBE	5	\$193	\$193	0.1			
(16)	Subcontinent Asian American-owned DBE	11	\$1,178	\$1,178	0.8			
(17)	Hispanic American-owned DBE	2	\$134	\$134	0.1			
(18)	Native American-owned DBE	3	\$74	\$74	0.0			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	0.0			
(21)	Unknown DBE	0	\$0					

 $Note: Spread sheet\ rounds\ numbers\ to\ nearest\ thousand\ dollars\ or\ tenth\ of\ one\ percent.\ WBE\ is\ white\ women-owned\ firms.$

^{*} 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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-31.

Agency: WSDOT and Local Programs
Funding source: FHWA- and State-funded

Time period: FY 2009
Type: Construction

Role: Prime Contractors, Subcontractors and Suppliers

Region: Washington

Firm To		(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample	(c) Estimated total dollars (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
Firm Ty			(thousands)		%	%	%	(a / e) x 100
(1) A	ll firms	3,554	\$1,223,120	\$1,223,120				
(2)	MBE/WBE	917	\$233,882	\$233,882	19.1	13.4	5.7	142.9
(3)	WBE	484	\$100,795	\$100,795	8.2	4.6	3.7	180.1
(4)	MBE	433	\$133,088	\$133,088	10.9	8.8	2.1	123.5
(5)	African American-owned	56	\$56,998	\$57,107	4.7	1.0	3.7	200+
(6)	Asian-Pacific American-owned	91	\$20,052	\$20,090	1.6	1.0	0.6	163.0
(7)	Subcontinent Asian American-owned	0	\$0	\$0	0.0	0.5	-0.5	0.0
(8)	Hispanic American-owned	99	\$20,379	\$20,418	1.7	3.4	-1.8	48.5
(9)	Native American-owned	174	\$35,405	\$35,472	2.9	2.8	0.1	102.4
(10)	Unknown MBE	13	\$254					
(11)	DBE-certified	554	\$91,287	\$91,287	7.5			
(12)	Woman-owned DBE	248	\$40,775	\$40,775	3.3			
(13)	Minority-owned DBE	306	\$50,512	\$50,512	4.1			
(14)	African American-owned DBE	47	\$4,288	\$4,288	0.4			
(15)	Asian-Pacific American-owned DBE	52	\$13,935	\$13,935	1.1			
(16)	Subcontinent Asian American-owned DBE	0	\$0	\$0	0.0			
(17)	Hispanic American-owned DBE	58	\$12,460	\$12,460	1.0			
(18)	Native American-owned DBE	149	\$19,829	\$19,829	1.6			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	0.0			
(21)	Unknown DBE	0	\$0					

 $Note: Spread sheet\ rounds\ numbers\ to\ nearest\ thousand\ dollars\ or\ tenth\ of\ one\ percent.\ WBE\ is\ white\ women-owned\ firms.$

^{*} 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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-32.

Agency: WSDOT and Local Programs Funding source: FHWA- and State-funded

Time period: FY 2010
Type: Construction

Role: Prime Contractors, Subcontractors and Suppliers

Region: Washington

Firm T	ype	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (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	2,935	\$1,514,068	\$1,514,068				
(2)	MBE/WBE	759	\$214,808	\$214,808	14.2	11.1	3.1	127.9
(3)	WBE	420	\$107,362	\$107,362	7.1	3.7	3.4	189.7
(4)	MBE	339	\$107,446	\$107,446	7.1	7.4	-0.3	96.5
(5)	African American-owned	55	\$18,260	\$18,282	1.2	1.1	0.1	112.0
(6)	Asian-Pacific American-owned	116	\$20,643	\$20,667	1.4	0.7	0.7	192.0
(7)	Subcontinent Asian American-owned	1	\$110	\$110	0.0	0.5	-0.4	1.6
(8)	Hispanic American-owned	76	\$20,609	\$20,634	1.4	2.5	-1.2	53.8
(9)	Native American-owned	83	\$47,694	\$47,752	3.2	2.6	0.6	122.6
(10)	Unknown MBE	8	\$130					
(11)	DBE-certified	321	\$81,973	\$81,973	5.4			
(12)	Woman-owned DBE	143	\$27,716	\$27,716	1.8			
(13)	Minority-owned DBE	178	\$54,258	\$54,258	3.6			
(14)	African American-owned DBE	43	\$6,378	\$6,378	0.4			
(15)	Asian-Pacific American-owned DBE	43	\$5,133	\$5,133	0.3			
(16)	Subcontinent Asian American-owned DBE	0	\$0	\$0	0.0			
(17)	Hispanic American-owned DBE	34	\$16,101	\$16,101	1.1			
(18)	Native American-owned DBE	58	\$26,645	\$26,645	1.8			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-33.

Agency: WSDOT and Local Programs Funding source: FHWA- and State-funded

Time period: FY 2011
Type: Construction

Role: Prime Contractors, Subcontractors and Suppliers

Region: Washington

Firm T	уре	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (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	2,599	\$3,055,614	\$3,055,614				
(2)	MBE/WBE	759	\$226,361	\$226,361	7.4	4.9	2.5	150.9
(3)	WBE	448	\$155,298	\$155,298	5.1	1.4	3.7	200+
(4)	MBE	311	\$71,064	\$71,064	2.3	3.5	-1.2	66.5
(5)	African American-owned	49	\$11,036	\$11,065	0.4	0.8	-0.4	44.9
(6)	Asian-Pacific American-owned	81	\$23,796	\$23,859	0.8	0.4	0.4	200+
(7)	Subcontinent Asian American-owned	3	\$974	\$977	0.0	0.2	-0.2	15.2
(8)	Hispanic American-owned	67	\$19,703	\$19,755	0.6	1.1	-0.4	59.1
(9)	Native American-owned	101	\$15,368	\$15,408	0.5	1.0	-0.5	49.7
(10)	Unknown MBE	10	\$187					
(11)	DBE-certified	329	\$56,434	\$56,434	1.8			
(12)	Woman-owned DBE	157	\$24,110	\$24,110	0.8			
(13)	Minority-owned DBE	172	\$32,325	\$32,325	1.1			
(14)	African American-owned DBE	31	\$1,700	\$1,700	0.1			
(15)	Asian-Pacific American-owned DBE	38	\$6,577	\$6,577	0.2			
(16)	Subcontinent Asian American-owned DBE	2	\$967	\$967	0.0			
(17)	Hispanic American-owned DBE	33	\$13,516	\$13,516	0.4			
(18)	Native American-owned DBE	68	\$9,566	\$9,566	0.3			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	0.0			
(21)	Unknown DBE	0	\$0					

 $Note: Spread sheet\ rounds\ numbers\ to\ nearest\ thousand\ dollars\ or\ tenth\ of\ one\ percent.\ WBE\ is\ white\ women-owned\ firms.$

^{*} 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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-34.

Agency: WSDOT and Local Programs
Funding source: FHWA- and State-funded

Time period: FY 2009
Type: Engineering

Role: Prime Contractors, Subcontractors and Suppliers

Region: Washington

		(a) Number of contracts (subcontracts)	(b) Dollars in sample	(c) Estimated total dollars	(d) Actual utilization (column c / column c, row1)	(e) Utilization benchmark (availability)	(f) Difference (column d - column e)	(g) Disparity index
Firm Ty	/pe	in sample	(thousands)	(thousands)*	%	%	%	(d / e) x 100
(1) A	III firms	690	\$168,310	\$168,310				
(2)	MBE/WBE	99	\$15,784	\$15,784	9.4	11.8	-2.4	79.4
(3)	WBE	54	\$9,500	\$9,500	5.6	3.3	2.3	170.4
(4)	MBE	45	\$6,283	\$6,283	3.7	8.5	-4.8	43.9
(5)	African American-owned	3	\$110	\$113	0.1	1.4	-1.3	4.8
(6)	Asian-Pacific American-owned	3	\$24	\$24	0.0	0.8	-0.8	1.8
(7)	Subcontinent Asian American-owned	13	\$3,118	\$3,202	1.9	3.4	-1.5	55.2
(8)	Hispanic American-owned	5	\$309	\$318	0.2	0.6	-0.4	31.7
(9)	Native American-owned	16	\$2,558	\$2,626	1.6	2.3	-0.7	69.0
(10)	Unknown MBE	5	\$164					
(11)	DBE-certified	37	\$7,707	\$7,707	4.6			
(12)	Woman-owned DBE	13	\$4,090	\$4,090	2.4			
(13)	Minority-owned DBE	24	\$3,617	\$3,617	2.1			
(14)	African American-owned DBE	2	\$33	\$33	0.0			
(15)	Asian-Pacific American-owned DBE	1	\$8	\$8	0.0			
(16)	Subcontinent Asian American-owned DBE	13	\$3,118	\$3,118	1.9			
(17)	Hispanic American-owned DBE	3	\$296	\$296	0.2			
(18)	Native American-owned DBE	5	\$162	\$162	0.1			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-35.

Agency: WSDOT and Local Programs Funding source: FHWA- and State-funded

Time period: FY 2010 Type: Engineering

Role: Prime Contractors, Subcontractors and Suppliers

Region: Washington

		(a) Number of contracts (subcontracts)	(b) Dollars in sample	(c) Estimated total dollars	(d) Actual utilization (column c / column c, row1)	(e) Utilization benchmark (availability)	(f) Difference (column d - column e)	(g) Disparity index
Firm Ty	ype	in sample	(thousands)	(thousands)*	%	%	%	(d / e) x 100
(1) A	ll firms	948	\$228,477	\$228,477				
(2)	MBE/WBE	128	\$32,778	\$32,778	14.3	13.6	0.7	105.5
(3)	WBE	97	\$26,584	\$26,584	11.6	5.8	5.8	200+
(4)	MBE	31	\$6,194	\$6,194	2.7	7.8	-5.1	34.7
(5)	African American-owned	2	\$188	\$192	0.1	1.1	-1.0	7.7
(6)	Asian-Pacific American-owned	6	\$623	\$636	0.3	0.8	-0.5	35.1
(7)	Subcontinent Asian American-owned	11	\$3,711	\$3,788	1.7	3.4	-1.7	48.9
(8)	Hispanic American-owned	1	\$32	\$33	0.0	0.5	-0.5	2.7
(9)	Native American-owned	7	\$1,515	\$1,546	0.7	2.0	-1.3	33.8
(10)	Unknown MBE	4	\$126					
(11)	DBE-certified	42	\$3,214	\$3,214	1.4			
(12)	Woman-owned DBE	34	\$2,362	\$2,362	1.0			
(13)	Minority-owned DBE	8	\$852	\$852	0.4			
(14)	African American-owned DBE	2	\$188	\$188	0.1			
(15)	Asian-Pacific American-owned DBE	1	\$22	\$22	0.0			
(16)	Subcontinent Asian American-owned DBE	4	\$628	\$628	0.3			
(17)	Hispanic American-owned DBE	0	\$0	\$0	0.0			
(18)	Native American-owned DBE	1	\$15	\$15	0.0			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-36.

Agency: WSDOT and Local Programs Funding source: FHWA- and State-funded

Time period: FY 2011
Type: Engineering

Role: Prime Contractors, Subcontractors and Suppliers

Region: Washington

Firm T	ype	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (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	659	\$97,634	\$97,634				
(2)	MBE/WBE	77	\$12,719	\$12,719	13.0	13.9	-0.9	93.7
(3)	WBE	37	\$7,187	\$7,187	7.4	5.0	2.4	148.0
(4)	MBE	40	\$5,532	\$5,532	5.7	8.9	-3.3	63.4
(5)	African American-owned	3	\$15	\$15	0.0	1.4	-1.4	1.1
(6)	Asian-Pacific American-owned	10	\$633	\$639	0.7	1.2	-0.6	53.5
(7)	Subcontinent Asian American-owned	5	\$1,952	\$1,970	2.0	2.9	-0.9	68.8
(8)	Hispanic American-owned	7	\$293	\$295	0.3	0.9	-0.6	34.0
(9)	Native American-owned	12	\$2,588	\$2,613	2.7	2.5	0.2	107.3
(10)	Unknown MBE	3	\$51					
(11)	DBE-certified	26	\$1,989	\$1,989	2.0			
(12)	Woman-owned DBE	13	\$1,517	\$1,517	1.6			
(13)	Minority-owned DBE	13	\$472	\$472	0.5			
(14)	African American-owned DBE	3	\$15	\$15	0.0			
(15)	Asian-Pacific American-owned DBE	6	\$236	\$236	0.2			
(16)	Subcontinent Asian American-owned DBE	2	\$11	\$11	0.0			
(17)	Hispanic American-owned DBE	2	\$209	\$209	0.2			
(18)	Native American-owned DBE	0	\$0	\$0	0.0			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-37.

Agency: WSDOT and Local Programs
Funding source: FHWA- and State-funded

Time period: FY 2009, 2010, 2011

Type: Construction and Engineering

Role: Prime Contractors Region: Washington

Firm T	ype	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (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	1,809	\$381,101	\$381,101				
(2)	MBE/WBE	176	\$31,964	\$31,964	8.4	19.4	-11.0	43.3
(3)	WBE	101	\$14,024	\$14,024	3.7	7.4	-3.7	49.6
(4)	MBE	75	\$17,940	\$17,940	4.7	11.9	-7.2	39.4
(5)	African American-owned	3	\$1,873	\$1,877	0.5	0.6	-0.1	89.1
(6)	Asian-Pacific American-owned	13	\$4,378	\$4,385	1.2	1.7	-0.5	68.7
(7)	Subcontinent Asian American-owned	8	\$517	\$518	0.1	1.1	-1.0	12.4
(8)	Hispanic American-owned	13	\$2,168	\$2,172	0.6	4.8	-4.2	11.8
(9)	Native American-owned	36	\$8,972	\$8,988	2.4	3.8	-1.4	62.2
(10)	Unknown MBE	2	\$32					
(11)	DBE-certified	60	\$10,653	\$10,653	2.8			
(12)	Woman-owned DBE	34	\$3,341	\$3,341	0.9			
(13)	Minority-owned DBE	26	\$7,312	\$7,312	1.9			
(14)	African American-owned DBE	0	\$0	\$0	0.0			
(15)	Asian-Pacific American-owned DBE	7	\$2,378	\$2,378	0.6			
(16)	Subcontinent Asian American-owned DBE	6	\$347	\$347	0.1			
(17)	Hispanic American-owned DBE	6	\$1,898	\$1,898	0.5			
(18)	Native American-owned DBE	7	\$2,689	\$2,689	0.7			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-38.
Agency: WSDOT and Local Programs
Funding source: FHWA- and State-funded
Time period: FY 2009, 2010, 2011

Type: Construction and Engineering

Role: Prime Contractors Region: Washington

Firm T	ype	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (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	460	\$4,024,083	\$4,024,083				
(2)	MBE/WBE	39	\$108,755	\$108,755	2.7	3.5	-0.8	77.3
(3)	WBE	15	\$29,104	\$29,104	0.7	0.7	0.0	103.2
(4)	MBE	24	\$79,651	\$79,651	2.0	2.8	-0.8	70.8
(5)	African American-owned	3	\$34,600	\$34,600	0.9	0.1	0.8	200+
(6)	Asian-Pacific American-owned	0	\$0	\$0	0.0	0.3	-0.3	0.0
(7)	Subcontinent Asian American-owned	6	\$6,433	\$6,433	0.2	0.3	-0.1	52.9
(8)	Hispanic American-owned	1	\$1,309	\$1,309	0.0	1.0	-1.0	3.1
(9)	Native American-owned	14	\$37,308	\$37,308	0.9	1.1	-0.2	81.4
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	7	\$19,290	\$19,290	0.5			
(12)	Woman-owned DBE	1	\$738	\$738	0.0			
(13)	Minority-owned DBE	6	\$18,552	\$18,552	0.5			
(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	2	\$2,233	\$2,233	0.1			
(17)	Hispanic American-owned DBE	0	\$0	\$0	0.0			
(18)	Native American-owned DBE	4	\$16,320	\$16,320	0.4			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	0.0			
(21)	Unknown DBE	0	\$0					

 $Note: Spread sheet \ rounds \ numbers \ to \ nearest \ thousand \ dollars \ or \ tenth \ of \ one \ percent. \ WBE \ is \ white \ women-owned \ firms.$

^{*} 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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Agency: WSDOT and Local Programs Funding source: FHWA-funded Time period: FY 2009, 2010, 2011 Type: Construction and Engineering

Role: Prime Contractors, Subcontractors and Suppliers

Region: Washington

Firm T	ype	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (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) A	All firms	9,321	\$5,112,353	\$5,112,353				
(2)	MBE/WBE	2,393	\$585,262	\$585,262		8.4		
(3)	WBE	1,341	\$309,757	\$309,757		2.9		
(4)	MBE	1,052	\$275,506	\$275,506		5.5		
(5)	African American-owned	147	\$63,276	\$63,424		0.8		
(6)	Asian-Pacific American-owned	273	\$62,323	\$62,469		0.5		
(7)	Subcontinent Asian American-owned	28	\$9,811	\$9,834		0.5		
(8)	Hispanic American-owned	224	\$51,357	\$51,477		1.8		
(9)	Native American-owned	346	\$88,095	\$88,301		1.8		
(10)	Unknown MBE	34	\$643					
(11)	DBE-certified	1,179	\$219,059	\$219,059				
(12)	Woman-owned DBE	534	\$85,399	\$85,399				
(13)	Minority-owned DBE	645	\$133,660	\$133,660				
(14)	African American-owned DBE	119	\$11,955	\$11,955				
(15)	Asian-Pacific American-owned DBE	133	\$24,786	\$24,786				
(16)	Subcontinent Asian American-owned DBE	17	\$4,672	\$4,672				
(17)	Hispanic American-owned DBE	123	\$39,423	\$39,423				
(18)	Native American-owned DBE	253	\$52,824	\$52,824				
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0				
(21)	Unknown DBE	0	\$0					

Analysis of potential DBEs

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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Type: Construction

Role: Prime Contractors, Subcontractors and Suppliers

Region: Washington

Firm Ty	/pe	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (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) A	ull firms	7,942	\$4,784,314	\$4,784,314				
(2)	MBE/WBE	2,173	\$538,912	\$538,912		8.1		
(3)	WBE	1,204	\$279,963	\$279,963		2.7		
(4)	MBE	969	\$258,948	\$258,948		5.4		
(5)	African American-owned	140	\$63,074	\$63,170		0.8		
(6)	Asian-Pacific American-owned	262	\$61,789	\$61,884		0.5		
(7)	Subcontinent Asian American-owned	4	\$1,084	\$1,086		0.3		
(8)	Hispanic American-owned	216	\$50,907	\$50,985		1.9		
(9)	Native American-owned	321	\$81,699	\$81,824		1.8		
(10)	Unknown MBE	26	\$395					
(11)	DBE-certified	1,105	\$208,804	\$208,804				
(12)	Woman-owned DBE	494	\$79,729	\$79,729				
(13)	Minority-owned DBE	611	\$129,076	\$129,076				
(14)	African American-owned DBE	113	\$11,830	\$11,830				
(15)	Asian-Pacific American-owned DBE	126	\$24,524	\$24,524				
(16)	Subcontinent Asian American-owned DBE	2	\$967	\$967				
(17)	Hispanic American-owned DBE	119	\$39,018	\$39,018				
(18)	Native American-owned DBE	251	\$52,737	\$52,737				
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0				
(21)	Unknown DBE	0	\$0					

Analysis of potential DBEs

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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Type: Engineering

Role: Prime Contractors, Subcontractors and Suppliers

Region: Washington

Firm T	уре	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (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) A	All firms	1,379	\$328,038	\$328,038				
(2)	MBE/WBE	220	\$46,350	\$46,350		12.9		
(3)	WBE	137	\$29,793	\$29,793		4.9		
(4)	MBE	83	\$16,557	\$16,557		8.0		
(5)	African American-owned	7	\$202	\$205		1.3		
(6)	Asian-Pacific American-owned	11	\$534	\$542		0.8		
(7)	Subcontinent Asian American-owned	24	\$8,727	\$8,860		3.3		
(8)	Hispanic American-owned	8	\$450	\$457		0.6		
(9)	Native American-owned	25	\$6,396	\$6,494		2.1		
(10)	Unknown MBE	8	\$248					
(11)	DBE-certified	74	\$10,254	\$10,254				
(12)	Woman-owned DBE	40	\$5,670	\$5,670				
(13)	Minority-owned DBE	34	\$4,585	\$4,585				
(14)	African American-owned DBE	6	\$125	\$125				
(15)	Asian-Pacific American-owned DBE	7	\$262	\$262				
(16)	Subcontinent Asian American-owned DBE	15	\$3,705	\$3,705				
(17)	Hispanic American-owned DBE	4	\$405	\$405				
(18)	Native American-owned DBE	2	\$87	\$87				
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0				
(21)	Unknown DBE	0	\$0					

Analysis of potential DBEs

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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-42.
Agency: WSDOT

Funding source: FHWA-funded

Time period: May 2005 - September 2006

Type: Construction

Role: Prime Contractors, Subcontractors and Suppliers

Region: Washington

		(a) Number of contracts (subcontracts)	(b) Dollars in sample	(c) Estimated total dollars	(d) Actual utilization (column c / column c, row1)	(e) Utilization benchmark (availability)	(f) Difference (column d - column e)	(g) Disparity index
Firm Ty	pe	in sample	(thousands)	(thousands)*	%	%	%	(d / e) x 100
(1) A	ll firms	1,005	\$327,664	\$327,664				
(2)	MBE/WBE	217	\$46,757	\$46,757	14.3	14.9	-0.7	95.5
(3)	WBE	132	\$23,523	\$23,523	7.2	4.6	2.5	155.0
(4)	MBE	85	\$23,233	\$23,233	7.1	10.3	-3.2	68.8
(5)	African American-owned	7	\$1,288	\$1,291	0.4	1.0	-0.6	40.0
(6)	Asian-Pacific American-owned	21	\$7,676	\$7,696	2.3	1.3	1.1	182.1
(7)	Subcontinent Asian American-owned	0	\$0	\$0	0.0	0.7	-0.7	0.0
(8)	Hispanic American-owned	19	\$5,431	\$5,445	1.7	4.1	-2.4	40.7
(9)	Native American-owned	34	\$8,778	\$8,801	2.7	3.2	-0.5	83.7
(10)	Unknown MBE	4	\$61					
(11)	DBE-certified	121	\$17,717	\$17,717	5.4			
(12)	Woman-owned DBE	73	\$12,046	\$12,046	3.7			
(13)	Minority-owned DBE	48	\$5,672	\$5,672	1.7			
(14)	African American-owned DBE	6	\$52	\$52	0.0			
(15)	Asian-Pacific American-owned DBE	8	\$1,399	\$1,399	0.4			
(16)	Subcontinent Asian American-owned DBE	0	\$0	\$0	0.0			
(17)	Hispanic American-owned DBE	9	\$2,426	\$2,426	0.7			
(18)	Native American-owned DBE	25	\$1,794	\$1,794	0.5			
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$0	\$0	0.0			
(21)	Unknown DBE	0	\$0					

 $Note: Spread sheet \ rounds \ numbers \ to \ nearest \ thous and \ dollars \ or \ tenth \ of \ one \ percent. \ WBE \ is \ white \ women-owned \ firms.$

^{*} 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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Agency: WSDOT

Funding source: FHWA-funded

Time period: May 2005 - September 2006

Type: Construction

Role: Prime Contractors, Subcontractors and Suppliers

Region: Washington

		(a) Number of contracts (subcontracts)	(b) Dollars	(c) Estimated	(d) Actual utilization (column c /	(e) Utilization benchmark	(f) Difference (column d -	(g)
Firm T	Firm Type		in sample (thousands)	total dollars (thousands)*	column c, row1) %	(availability) %	column e) %	Disparity index (d / e) x 100
(1) All firms		1,005	\$327,664	\$327,664				
(2)	MBE/WBE	217	\$46,757	\$46,757		14.9		
(3)	WBE	132	\$23,523	\$23,523		4.6		
(4)	MBE	85	\$23,233	\$23,233		10.3		
(5)	African American-owned	7	\$1,288	\$1,291		1.0		
(6)	Asian-Pacific American-owned	21	\$7,676	\$7,696		1.3		
(7)	Subcontinent Asian American-owned	0	\$0	\$0		0.7		
(8)	Hispanic American-owned	19	\$5,431	\$5,445		4.1		
(9)	Native American-owned	34	\$8,778	\$8,801		3.2		
(10)	Unknown MBE	4	\$61					
(11)	DBE-certified	121	\$17,717	\$17,717				
(12)	Woman-owned DBE	73	\$12,046	\$12,046				
(13)	Minority-owned DBE	48	\$5,672	\$5,672				
(14)	African American-owned DBE	6	\$52	\$52				
(15)	Asian-Pacific American-owned DBE	8	\$1,399	\$1,399				
(16)	Subcontinent Asian American-owned DBE	0	\$0	\$0				
(17)	Hispanic American-owned DBE	9	\$2,426	\$2,426				
(18)	Native American-owned DBE	25	\$1,794	\$1,794				
(19)	Unknown DBE-MBE	0	\$0					
(20)	White male-owned DBE	0	\$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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Figure K-44.
Agency: WSDOT

Funding source: FTA-funded
Time period: FY 2009, 2010, 2011
Type: Construction and Engineering

Role: Prime Contractors, Subcontractors and Suppliers

Region: Washington

Firm T	ype	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (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		32	\$1,960	\$1,960				
(2)	MBE/WBE	4	\$148	\$148	7.5	22.2	-14.6	34.0
(3)	WBE	3	\$113	\$113	5.8	10.2	-4.4	56.6
(4)	MBE	1	\$35	\$35	1.8	12.0	-10.2	14.8
(5)	African American-owned	0	\$0	\$0	0.0	1.0	-1.0	0.0
(6)	Asian-Pacific American-owned	0	\$0	\$0	0.0	1.9	-1.9	0.0
(7)	Subcontinent Asian American-owned	0	\$0	\$0	0.0	0.7	-0.7	0.0
(8)	Hispanic American-owned	1	\$35	\$35	1.8	4.7	-2.9	37.9
(9)	Native American-owned	0	\$0	\$0	0.0	3.7	-3.7	0.0
(10)	Unknown MBE	0	\$0					
(11)	DBE-certified	0	\$0	\$0	0.0			
(12)	Woman-owned DBE	0	\$0	\$0	0.0			
(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					
(20)	White male-owned DBE	0	\$0	\$0	0.0			
(21)	Unknown DBE	0	\$0					

 $Note: Spread sheet \ rounds \ numbers \ to \ nearest \ thous and \ dollars \ or \ tenth \ of \ one \ percent. \ WBE \ is \ white \ women-owned \ firms.$

^{*} 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 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.