



# **Caltrans 2016 Disparity Study**

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**FINAL REPORT**

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## **Caltrans 2016 Disparity Study**

**Prepared for**

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# CHAPTER ES.

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## Executive Summary

# CHAPTER ES.

## Executive Summary

The California Department of Transportation (Caltrans) retained BBC Research & Consulting (BBC) to conduct a *disparity study* to help inform the department's efforts to comply with the department's implementation of 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 United States Department of Transportation (USDOT)-funded contracts. The DBE program includes various measures to encourage the participation of minority- and woman-owned businesses including *race- and gender-neutral* measures—which are designed to encourage the participation of all businesses—and, potentially, *race- and gender-conscious* measures—which are designed to specifically encourage the participation of minority- and woman-owned businesses (e.g., using DBE contract goals).

As part of the disparity study, BBC assessed whether there were any disparities between:

- The percentage of contracting dollars (including subcontract dollars) that minority- and woman-owned businesses received on construction and professional services contracts that Caltrans awarded between January 1, 2011 and December 31, 2014 (i.e., *utilization*);<sup>1</sup> and
- The percentage of construction and professional services contracting dollars that minority- and woman-owned businesses might be expected to receive based on their availability to perform specific types and sizes of Caltrans prime contracts and subcontracts (i.e., *availability*).

The disparity study also examined other quantitative and qualitative information related to:

- The legal framework surrounding Caltrans' compliance with the Federal DBE Program;
- Local marketplace conditions for minority- and woman-owned businesses; and
- Contracting practices and business assistance programs that Caltrans currently has in place.

Caltrans could use information from the study to help refine its implementation of the Federal DBE Program including setting an overall goal for the participation of minority- and woman-owned businesses and DBEs in Caltrans contracting; determining which program measures to use to encourage the participation of DBEs on Caltrans contracts; and, if appropriate, determining which groups would be eligible for race- and gender-conscious program measures.

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<sup>1</sup> The study team considered businesses as minority- or woman-owned regardless of whether they were certified as DBEs through the California Unified Certification Program (CUCP).

BBC summarizes key information from the 2016 Caltrans Disparity Study in four parts:

- A. Analyses in the disparity study;
- B. Utilization and disparity analysis results;
- C. Overall DBE Goal; and
- D. Program implementation.

## **A. Analyses in the Disparity Study**

Along with measuring potential disparities between the participation and availability of minority- and woman-owned businesses in Caltrans contracts, BBC also examined other quantitative and qualitative information related to Caltrans' implementation of the Federal DBE Program:

- BBC conducted quantitative analyses of the success of minorities, women, and minority- and woman-owned businesses throughout California. In addition, the study team collected qualitative information about potential barriers that minority- and woman-owned businesses face in the local marketplace through in-depth interviews, telephone surveys, public meetings, and written testimony (see Chapter 2, Appendix C, and Appendix D).
- BBC analyzed the percentage of relevant Caltrans contracting work that minority- and woman-owned businesses are available to perform. That analysis was based on telephone surveys that the study team completed with California businesses that work in industries related to the types of construction and professional services contracts that Caltrans and subrecipient local agencies award (see Chapter 4 and Appendix E).
- BBC analyzed the dollars that minority- and woman-owned businesses received on more than 21,000 construction and professional services prime contracts and subcontracts that Caltrans and subrecipient local agencies awarded between January 1, 2011 and December 31, 2014 (i.e., the study period) (see Chapter 3 and Chapter 5).
- BBC examined whether there were any disparities between the participation and availability of minority- and woman-owned businesses on the construction and professional services contracts that Caltrans awarded during the study period (see Chapter 6 and Chapter 7).
- BBC provided Caltrans with information from the availability analysis and other research that the department might consider in setting its three-year overall DBE goal including the base figure and consideration of a "step-2" adjustment (see Chapter 8).
- BBC reviewed Caltrans' current contracting practices and DBE program measures and provided guidance related to additional program options and refinements to those practices and measures (see Chapter 9 and Chapter 10).
- 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, state, and local requirements related to minority- and woman-owned business programs including the Federal DBE Program (see Appendix B).

## B. Utilization and Disparity Analysis Results

Caltrans currently uses DBE contract goals on many of the federally funded contracts that it awards. Prime contractors can meet contract goals by either making subcontracting commitments with certified DBE subcontractors at the time of bid or by showing that they made reasonable good faith efforts to fulfill the goals but could not do so. Utilization and disparity analysis results, along with other pertinent information, are relevant to Caltrans' determination of which groups could be eligible for any race- or gender-conscious measures. Courts have considered the existence of substantial disparities between participation and availability for particular groups as inferences of discrimination in the local marketplace against those groups and as support for using race- and gender-conscious program measures. In addition, that information is useful for Caltrans to examine the effectiveness of the measures that it is currently using to encourage the participation of minority- and woman-owned businesses.

**Utilization results.** The study team measured the participation of minority- and woman-owned businesses in terms of *utilization*—the percentage of prime contract and subcontract dollars that minority- and woman-owned businesses received on Caltrans prime contracts and subcontracts during the study period. Figure ES-1 presents the overall percentage of contracting dollars that minority- and woman-owned businesses received on construction and professional services contracts that Caltrans awarded during the study period. The darker portion of the bar represents the percentage of contracting dollars that certified DBEs received during the study period. As shown in Figure ES-1, overall, minority- and woman-owned businesses received 14.4 percent of the relevant contracting dollars that Caltrans and subrecipient local agencies awarded during the study period. The darker portion of the bar shows that less than half of those dollars—6.6 percent—went to certified DBEs.

**Figure ES-1.**  
**Participation of minority- and woman-owned businesses**

**Notes:**

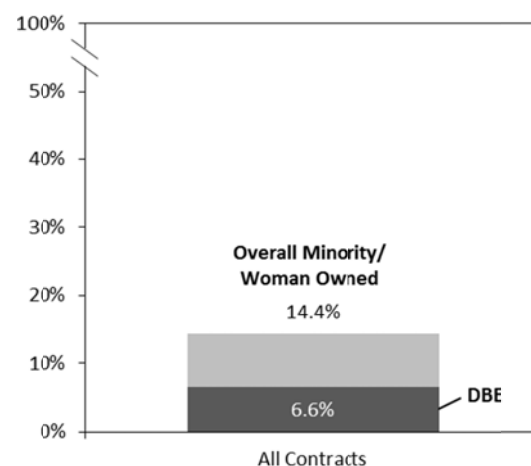
The study team analyzed 21,667 prime contracts and subcontracts.

The darker portion of the bar represents participation of certified DBEs.

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

**Source:**

BBC Research & Consulting utilization analysis.



**Disparity analysis results.** Although information about the participation of minority- and woman-owned businesses in Caltrans contracts is instructive on its own, it is even more instructive when it is compared with the level of participation that might be expected based on the availability of minority- and woman-owned businesses for Caltrans work. As part of the disparity analysis, BBC compared the participation of minority- and woman-owned businesses in Caltrans prime contracts and subcontracts with the percentage of contract dollars that those businesses might be expected to receive based on their availability for that work. BBC expressed

both participation and availability as percentages of the total dollars that a particular group received for a particular set of contracts. BBC then calculated a *disparity index* by dividing participation by availability and multiplying by 100.<sup>2</sup> A disparity index of 100 indicates an exact match between participation 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 participation and availability, and disparities of less than 80 are described in this report as *substantial*.<sup>3</sup> Disparity analysis results for key contract sets are described below.

**All contracts.** Figure ES-2 presents disparity analysis results for all construction and professional services contracts that Caltrans and subrecipient local agencies awarded during the study period. The line down the center of the graph shows a disparity index of 100, which indicates parity between participation and availability. For reference, a line is also drawn at a disparity index level of 80, because some courts use 80 as a threshold for what indicates a substantial disparity. As shown in Figure ES-2, overall, the participation of minority- and woman-owned businesses in contracts that Caltrans and subrecipient local agencies awarded during the study period was less than what one might expect based on the availability of those businesses for that work. The disparity index of 74 indicates that minority- and woman-owned businesses considered together received approximately \$0.74 for every dollar that they might be expected to receive based on their availability for the prime contracts and subcontracts that Caltrans and subrecipient local agencies awarded during the study period. In addition, a number of individual groups exhibited disparity indices below parity.

- Three groups exhibited disparity indices substantially below parity—Black American-owned businesses (disparity index of 39), Hispanic American-owned business (disparity index of 69), and Native American-owned businesses (disparity index of 78).
- Non-Hispanic white woman-owned businesses (disparity index of 80) exhibited a disparity that would not be considered substantial.
- Asian Pacific American-owned businesses (disparity index of 106) and Subcontinent Asian American-owned businesses (disparity index of 111) did not exhibit disparities between participation and availability.

Caltrans applied DBE contract goals to a substantial portion of the construction and professional services contracts that it awarded during the study period, so the disparity analysis results shown in Figure ES-2 are largely reflective of the use of those measures.

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<sup>2</sup> For example, if actual participation of non-Hispanic white woman-owned businesses on a set of contracts was 2 percent and the availability of non-Hispanic white woman-owned businesses 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.

<sup>3</sup> Several courts deem a disparity index below 80 as being “substantial” and have accepted it as evidence of adverse conditions for minority- and woman-owned businesses. 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 ES-2.**  
**Disparity indices by group**

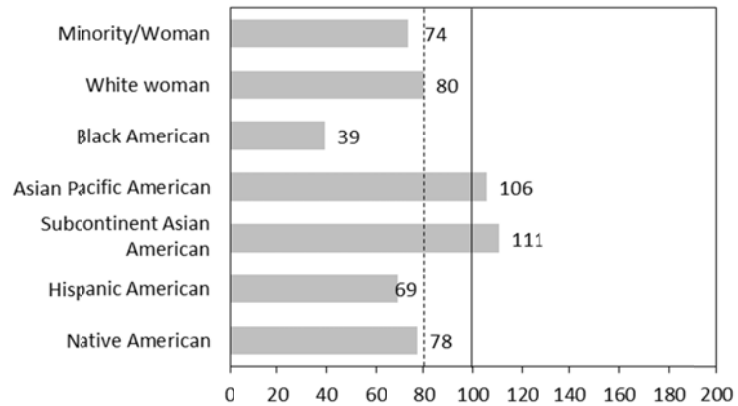
Note:

The study team analyzed 21,667 prime contracts/subcontracts.

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

Source:

BBC Research & Consulting disparity analysis.



**State-funded contracts.** It is instructive to examine whether disparities exist for minority- or woman-owned businesses for contracts that Caltrans awarded in a *race- and gender-neutral environment*—that is, for contracts to which Caltrans did not apply race- or gender-conscious measures such as DBE contract goals. Caltrans did not apply such measures to state-funded contracts that it awarded during the study period. Figure ES-3 presents disparity analysis results for those contracts.

**Figure ES-3.**  
**Disparity indices for state-funded contracts**

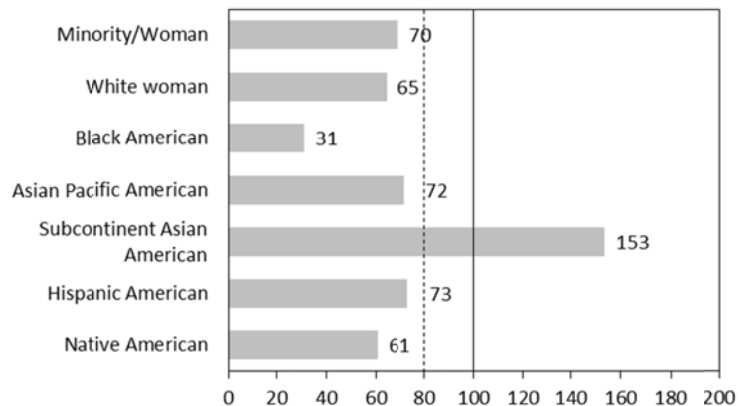
Note:

The study team analyzed 7,064 state-funded contracts/subcontracts.

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

Source:

BBC Research & Consulting disparity analysis.



As shown in Figure ES-3, minority- and woman-owned businesses considered together exhibited a substantial disparity on state-funded contracts (disparity index of 70). In addition, a number of individual groups exhibited disparity indices below parity.

- Five groups exhibited disparities that were substantially below parity— non-Hispanic woman-owned businesses (disparity index of 65), Black American-owned businesses (disparity index of 31), Asian Pacific American-owned businesses (disparity index of 72), Hispanic American-owned businesses (disparity index of 73), and Native American-owned businesses (disparity index of 61).
- Subcontinent Asian American-owned businesses did not exhibit a disparity between participation and availability (disparity index of 153).

## C. Overall DBE Goal

According to 49 Code of Federal Regulations (CFR) Part 26, an agency is required to develop and submit an overall 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 in the agency's USDOT-funded contracts. The agency must try to meet the goal using race- and gender-neutral measures and, if necessary, race- and gender-conscious measures as well.<sup>4</sup> As specified in the Final Rule effective February 28, 2011, an agency is required to submit its overall DBE goal every three years.<sup>5</sup> However, the overall DBE goal is an *annual* goal in that an agency must monitor DBE participation in its USDOT-funded contracts every year. If DBE participation for a particular year is less than the overall DBE goal for that year, the agency must analyze the reasons for the difference and establish specific measures that enable the agency to meet the goal in the next year.

Caltrans must prepare and submit an overall DBE goal that is supported by information about the steps it used to develop the goal. Caltrans is required to next submit a goal for federal fiscal years (FFYs) 2019 through 2021. Federal regulations require Caltrans to establish its overall DBE goal using a two-step process:

1. Determining a base figure; and
2. Considering a "step-2" adjustment.

**Determining a base figure.** Establishing a base figure is the first step in calculating an overall DBE goal for Caltrans' Federal Highway Administration (FHWA)-funded contracts. BBC calculated the base figure by measuring the availability of *potential DBEs*—that is, minority- and woman-owned businesses 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 Caltrans awarded during the study period. BBC's approach to calculating Caltrans' base figure is consistent with relevant court decisions, federal regulations, and USDOT guidance. BBC's analysis indicates that the availability of potential DBEs for Caltrans FHWA-funded contracts is 17.6 percent. Caltrans might consider 17.6 percent as the base figure for its overall goal for DBE participation.<sup>6</sup>

**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;

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<sup>4</sup> 49 CFR Sections 26.45, 26.51.

<sup>5</sup> <http://www.gpo.gov/fdsys/pkg/FR-2011-01-28/html/2011-1531.htm>

<sup>6</sup> Caltrans 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.



- 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.<sup>7</sup>

Based on information from the disparity study, there are several reasons why Caltrans might consider adjusting the 17.6 percent base figure:

- Caltrans might consider making an upward adjustment to its base figure to account for barriers that minorities, women, and minority- and woman-owned businesses face in the California marketplace related to human capital, financial capital, business ownership, and business success (for details, see Chapter 2 and Appendices C and D). Such an adjustment would correspond to a “determination of the level of DBE participation you would expect absent the effects of discrimination.”<sup>8</sup>
- Caltrans might also consider a downward adjustment to its base figure based on the volume of work that DBEs have performed in recent years on its contracts. Caltrans’ utilization reports for FFYs 2011 through 2015 indicated median annual DBE participation of 10.7 percent for those years, which is lower than its base figure. (BBC’s analyses showed DBE participation on federally funded Caltrans contracts during the study period to be 7.4 percent.) 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.

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.

## D. Program Implementation

Chapter 10 reviews information relevant to Caltrans’ implementation of the Federal DBE Program. Caltrans should review study results and other relevant information in connection with making decisions concerning the program. Key areas of potential refinement are discussed below.

- Caltrans should consider continuing its efforts to network with minority- and woman-owned businesses including its efforts with the Statewide Small Business Council as well as regional and district small business councils. Caltrans should continue to use the councils to understand the needs of small businesses throughout the state and address specific challenges within the small business community.
- In order to foster increased participation of small businesses—including many minority- and woman-owned businesses—Caltrans should consider making efforts to unbundle relatively large contracts into several smaller contracts. Doing so would result in that work being more accessible to small businesses throughout California, which in turn might

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<sup>7</sup> 49 CFR Section 26.45.

<sup>8</sup> 49 CFR Section 26.45 (b).

increase opportunities for minority- and woman-owned businesses and result in greater minority- and woman-owned business participation.

- Caltrans should review and consider ways to increase prime contracting and subcontracting opportunities for small businesses. With regard to prime contract opportunities, Caltrans might consider setting aside small prime contracts for small business bidding to encourage the participation of minority- and woman-owned businesses as prime contractors.
- Caltrans should consider expanding data collection efforts to ensure that data on all subcontractors, suppliers, and truckers are captured on Caltrans contracts in an electronic format. Such efforts will not only make reporting more efficient, but will also allow Caltrans to more effectively monitor changes in the marketplace.
- Disparity analysis results indicated that several racial/ethnic and gender groups show disparities on the contracts that Caltrans and subrecipient local agencies awarded during the study period, despite the fact that Caltrans applied DBE contract goals to many of those contracts. Caltrans should consider continuing its use of DBE contract goals in the future. The department will need to ensure that the use of those goals is narrowly tailored and consistent with other relevant legal standards (for details, see Appendix B).

As part of the disparity study, the study team also examined information concerning conditions in the local marketplace for minorities, women, and minority- and woman-owned businesses including results for different racial/ethnic and gender groups. Caltrans 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 as part of its implementation of the Federal DBE Program, and if so, what groups might be considered eligible to participate in such measures.

# CHAPTER 1.

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## Introduction

# CHAPTER 1.

## Introduction

The California Department of Transportation (Caltrans) is responsible for managing more than 50,000 miles of California's federal and state highways. As a United States Department of Transportation (USDOT) fund recipient, Caltrans implements 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.

Caltrans retained BBC Research & Consulting (BBC) to conduct a *disparity study* to help evaluate the effectiveness of its implementation of the Federal DBE Program in encouraging the participation of minority- and woman-owned businesses in its federally funded contracts. A disparity study examines whether there are any disparities between:

- The percentage of prime contract and subcontract dollars that an agency spent with minority- and woman-owned businesses during a particular time period (i.e., utilization); and
- The percentage of prime contract and subcontract dollars that minority- and woman-owned businesses might be expected to receive based on their availability to perform specific types and sizes of contracts that the agency awards (i.e., *availability*).

Disparity studies also examine other quantitative and qualitative information related to:

- Local marketplace conditions for minority- and woman-owned businesses;
- Contracting practices and business programs that the agency currently has in place; and
- Various aspects of the Federal DBE Program and implementing it in a legally defensible manner.

There are several reasons why a disparity study is useful to an agency that implements the Federal DBE Program:

- The types of research that are conducted as part of a disparity study provide information that is useful to an agency that is implementing the program (e.g., setting an overall DBE goal);
- A disparity study often provides insights into how to improve contracting opportunities for local small businesses including many minority- and woman-owned businesses;
- An independent, objective review of the participation of minority- and woman-owned businesses in an agency's contracting is valuable to agency leadership and to external groups that may be monitoring the agency's contracting practices; and
- State and local agencies that have successfully defended implementations of the Federal DBE Program in court have typically relied on information from disparity studies.

BBC introduces the 2016 Caltrans Disparity Study in three parts:

- A. Background;
- B. Study scope; and
- C. Study team members.

## A. Background

The Federal DBE Program is a program designed to increase the participation of minority- and woman-owned businesses in USDOT-funded contracts. As a recipient of USDOT funds, Caltrans must implement the Federal DBE Program and comply with corresponding federal regulations.

**Setting an overall goal for DBE participation.** As part of the Federal DBE Program, every three years an agency is required to set an overall goal for DBE participation in its USDOT-funded contracts.<sup>1</sup> Although an agency is required to set the goal every three years, the overall DBE goal is an annual goal in that the agency must monitor DBE participation in its USDOT-funded contracts every year. If DBE participation for a particular year is less than the overall DBE goal, then the agency must analyze the reasons for the difference and establish specific measures that enable the agency to meet the goal in the next year.

The Federal DBE Program describes the steps an agency must follow in establishing its overall DBE goal. To begin the goal-setting process, an agency must develop a base figure based on demonstrable evidence of the availability of DBEs to participate in the agency's USDOT-funded contracts. Then, the agency must consider conditions in the local marketplace for minority- and woman-owned businesses and make an upward, downward, or no adjustment to its base figure as it determines its overall DBE goal (referred to as a "step-2" adjustment).

**Projecting the portion of the overall DBE goal to be met through race- and gender-neutral means.** According to 49 Code of Federal Regulations (CFR) Part 26, an agency must meet the maximum feasible portion of its overall DBE goal for DBE through the use of *race- and gender-neutral program measures*.<sup>2</sup> Race- and gender-neutral measures are measures that are designed to encourage the participation of all businesses—or all small businesses—in an agency's contracting (for examples of race- and gender-neutral measures, see 49 CFR Section 26.51(b)). Participation in such measures is not limited to minority- and woman-owned businesses or to certified DBEs. If an agency cannot meet its goal solely through the use of race- and gender-neutral measures, then it must consider also using *race- and gender-conscious program measures*. Race- and gender-conscious measures are designed to specifically encourage the participation of minority- and woman-owned businesses in an agency's contracting (e.g., using DBE goals on individual contracts).

Every three years, the Federal DBE Program requires an agency to project the portion of its overall DBE goal that it will meet through race- and gender-neutral measures and the portion

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<sup>1</sup> <http://www.gpo.gov/fdsys/pkg/FR-2011-01-28/html/2011-1531.htm>

<sup>2</sup> 49 CFR Section 26.51.

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.<sup>3</sup>

Caltrans applies DBE contract goals—which is considered a race- and gender-conscious measure—to many of the federally funded contracts that it awards. Prime contractors bidding on those contracts must either meet the goals by 1) being a DBE or 2) by making subcontracting commitments to certified DBEs or by submitting *good faith efforts* (GFE) documentation. Caltrans reviews good faith efforts and will approve GFEs if prime contractors demonstrate good faith efforts towards compliance with the goals. If prime contractors do not meet the goals through subcontracting commitments or through approved GFE documentation, then Caltrans will reject prime contractors' bids.

Caltrans does not use any race- or gender-conscious measures when awarding state-funded contracts because of Proposition 209. Proposition 209, which California voters passed in 1996, amended the California constitution to prohibit discrimination and the use of race- and gender-based preferences in public contracting, public employment, and public education. Thus, Proposition 209 prohibited government agencies in California—including Caltrans—from using race- or gender-conscious measures when awarding state-funded contracts. (However, Proposition 209 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.”)

**Determining whether all groups will be eligible for race- and gender-conscious measures.** If an agency determines that race- or gender-conscious measures—such as DBE contract goals—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. Eligibility for such measures must be limited to only those racial/ethnic or gender groups for which compelling evidence of discrimination exists in the local marketplace. USDOT provides a waiver provision if an agency determines that its implementation of the Federal DBE Program should only include certain racial/ethnic or gender groups in the race- or gender-conscious measures that it uses.

## B. Study Scope

Information from the disparity study will help Caltrans continue to encourage the participation of minority- and woman-owned businesses in federally funded contracts. In addition, information from the study will help Caltrans continue to implement the Federal DBE Program in a legally defensible manner.

**Definitions of minority- and woman-owned businesses.** To interpret the core analyses presented in the disparity study, it is useful to understand how the study team treats minority- and woman-owned businesses and businesses that are certified as DBEs through Caltrans. It is also important to understand how the study team treats businesses owned by minority women in its analyses.

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<sup>3</sup> <http://www.dotcr.ost.dot.gov/Documents/Dbe/49CFRPART26.doc>

**Minority- and woman-owned businesses.** The study team focused its analyses on the minority- and woman-owned business groups that the Federal DBE Program presumes to be disadvantaged:

- Asian Pacific American-owned businesses;
- Black American-owned businesses;
- Hispanic American-owned businesses;
- Native American-owned businesses;
- Subcontinent Asian American-owned businesses;
- Woman-owned businesses.

The study team analyzed the possibility that race- or gender-based discrimination affected the participation of minority- and woman-owned businesses in Caltrans work based specifically on the race/ethnicity and gender of business ownership. That is, the study team considered businesses as minority- or woman-owned regardless of whether they were or could be certified as DBEs through Caltrans. Analyzing the participation and availability of minority- and woman-owned businesses regardless of DBE certification allowed the study team to assess whether there are disparities affecting all minority- and woman-owned businesses and not just DBE-certified businesses.

**DBEs.** DBEs are minority- and woman-owned businesses that are specifically certified as such through Caltrans. A determination of DBE eligibility includes assessing business' gross revenues and business owners' personal net worth. Some minority- and woman-owned businesses do not qualify as DBEs because of gross revenue or net worth requirements. Businesses seeking DBE certification in California are required to submit an application to Caltrans. The application is available online and requires businesses to submit various information including business name; contact information; tax information; work specializations; and race/ethnicity and gender of the owners. Caltrans reviews each application. The review process will involve on-site meetings and additional documentation to confirm required business information.<sup>4</sup>

Because the Federal DBE Program requires agencies to track the participation of certified DBEs, BBC reports utilization results for all minority- and woman-owned businesses and separately for those minority- and woman-owned businesses that are certified as DBEs. However, BBC does not report availability or disparity analysis results separately for certified DBEs.

**Potential DBEs.** Potential DBEs are minority- and woman-owned businesses 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 consider businesses that have been decertified or have graduated from the DBE Program as potential DBEs in the study. BBC examined the availability of potential DBEs as part of helping Caltrans calculate the

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<sup>4</sup> Businesses owned by non-Hispanic white men can be certified as DBEs if those businesses meet the certification requirements in 49 CFR Part 26.

base figure of its overall DBE goal. Figure 1-1 provides further explanation of BBC's definition of potential DBEs.

**Minority woman-owned businesses.** BBC considered four options when considering how to classify businesses owned by minority women:

- Classifying those businesses as both minority-owned and woman-owned;
- Creating unique groups of minority woman-owned businesses;
- Classifying minority woman-owned businesses with all other woman-owned businesses; and
- Classifying minority woman-owned businesses with their corresponding minority groups.

BBC chose not to code businesses as both woman-owned and minority-owned to avoid double-counting certain businesses when reporting disparity study results. Creating groups of minority woman-owned businesses that were distinct from businesses owned by minority men (e.g., Black American woman-owned businesses versus businesses owned by Black American men) was also unworkable, because some minority groups exhibited such low participation that further disaggregation by gender would have made it difficult to interpret study results.

After rejecting the first two options, BBC then considered whether to group minority woman-owned businesses with all other woman-owned businesses or with their corresponding minority groups. BBC chose the latter (e.g., grouping Black American woman-owned businesses with all other Black American-owned businesses).

**Majority-owned businesses.** Majority-owned businesses are businesses that are not owned by minorities or women (i.e., businesses owned by non-Hispanic white men). In core disparity study analyses, the study team coded each business as minority-, woman-, or majority-owned.

**Analyses in the disparity study.** BBC examined whether there are any disparities between the participation and availability of minority- and woman-owned businesses on Caltrans contracts. The study focused on transportation-related construction and professional services

### **Figure 1-1. Definition of potential DBEs**

To help Caltrans calculate its overall DBE goal, BBC did not include the following types of minority- and woman-owned businesses in its definition of potential DBEs:

- Minority- and woman-owned businesses that have graduated from the DBE Program and have not been recertified;
- Minority- and woman-owned businesses that are not currently DBE-certified but that have applied for DBE certification and have been denied; and
- Minority- and woman-owned businesses that are not currently DBE-certified and that appear 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 United States Small Business Administration (SBA) small business size standards. Only a few minority- and woman-owned businesses appeared to have exceeded those revenue limits based on information that they provided as part of availability surveys. The revenue categories that the study team used to classify businesses 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 status as a potential DBE.



contracts that Caltrans and subrecipient local agencies awarded between January 1, 2011 and December 31, 2014 (i.e., the study period). Caltrans applied DBE contract goals to many of the federally funded contracts that it awarded during the study period.

In addition to the core utilization, availability, and disparity analyses, the disparity study also includes:

- An analysis of local marketplace conditions for minority- and woman-owned businesses;
- An assessment of Caltrans's contracting practices and business assistance programs; and
- Other information for Caltrans to consider as it refines its implementation of the Federal DBE Program.

That information is organized in the disparity study report in the following manner:

**Marketplace conditions.** BBC conducted quantitative analyses of the success of minorities and women and minority- and woman-owned businesses in the local contracting industries. BBC compared business outcomes for minorities, women, and minority- and woman-owned businesses to outcomes for non-Hispanic white men and majority-owned businesses. In addition, the study team collected qualitative information about potential barriers that small businesses and minority- and woman-owned businesses face in California through in-depth interviews. Information about marketplace conditions is presented in **Chapter 2, Appendix C, and Appendix D.**

**Data collection and analysis.** BBC examined data from multiple sources to complete the utilization and availability analyses including telephone surveys that the study team conducted with hundreds of businesses throughout California. 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.**

**Availability analysis.** As part of the availability analysis, BBC estimated the percentage of Caltrans's prime contract and subcontract dollars that minority- and woman-owned businesses are *ready, willing, and able* to perform. That analysis was based on Caltrans data and on telephone surveys that the study team conducted with thousands of California businesses that work in industries related to the types of contracting dollars that Caltrans and subrecipient local agencies award. BBC analyzed availability separately for businesses owned by specific minority groups and non-Hispanic white women and for different types of contracts. Results from the availability analysis are presented in **Chapter 4 and Appendix E.**

**Utilization analysis.** BBC analyzed prime contract and subcontract dollars that went to minority- and woman-owned businesses on contracts that Caltrans and subrecipient local agencies awarded between January 1, 2011 and December 31, 2014. Those data included information about associated subcontracts.<sup>5</sup> Note that Caltrans applied DBE contract goals to many of those contracts. BBC analyzed participation separately for businesses owned by specific minority

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<sup>5</sup> Note that prime contractors—not Caltrans—actually *award* subcontracts to subcontractors. However, for simplicity, throughout the report, BBC refers to Caltrans as *awarding* subcontracts.

groups and non-Hispanic white women and for different types of contracts. Results from the utilization analysis are presented in **Chapter 5**.

**Disparity analysis.** BBC examined whether there were any disparities between the participation of minority- and woman-owned businesses on contracts that Caltrans and subrecipient local agencies awarded during the study period and the availability of those businesses for that work. BBC analyzed disparity analysis results separately for businesses owned by specific minority groups and non-Hispanic white women and for different types of contracts. The study team also assessed whether any observed disparities were statistically significant. Results from the disparity analysis are presented in **Chapter 6** and **Appendix E**.

**Further exploration of disparities.** BBC explored any additional disparities between the participation and availability of minority- and woman-owned businesses on contracts that Caltrans and subrecipient local agencies awarded during the study period. Those analyses included comparisons of results for different subsets of Caltrans contracts and an examination of bids for a sample of contracts. BBC presents the results of those analyses in **Chapter 7**.

**Overall DBE goal.** Based on information from the availability analysis and other research, BBC provided Caltrans with information that will help the department set its overall DBE goal including the base figure and consideration of a step-2 adjustment. Information about Caltrans's overall DBE goal is presented in **Chapter 8**.

**Race- and gender-neutral measures.** BBC reviewed information regarding evidence of discrimination in the California contracting marketplace; analyzed Caltrans's experience with meeting its overall DBE goal in the past; and provided information about Caltrans's past performance in encouraging the participation of minority- and woman-owned businesses using race- and gender-neutral measures. Information from those analyses is presented in **Chapter 9**.

**Implementation of the Federal DBE Program.** BBC reviewed Caltrans's contracting practices and the program measures that it uses as part of its implementation of the Federal DBE Program. BBC provided guidance related to additional program options and changes to current contracting practices. The study team's review and guidance is presented in **Chapter 10**.

## **C. Study Team Members**

The BBC study team was made up of five firms that, collectively, possess decades of experience related to conducting disparity studies in connection with the Federal DBE Program.

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

**Customer Research International (CRI).** CRI is a Subcontinent Asian American-owned survey fieldwork firm based in San Marcos, Texas. CRI conducted telephone surveys with thousands of California businesses to gather information for the utilization and availability analyses.

**GCAP Services (GCAP).** GCAP is a minority-owned professional services firm based in Costa Mesa and Sacramento, California. GCAP assisted the project team with community engagement and data collection tasks.

**Holland & Knight.** Holland & Knight is a law firm with offices throughout the country. Holland & Knight provided legal consulting services throughout the course of the study.

**Keen Independent Research (Keen Independent).** Keen Independent is an Arizona-based research firm. Keen Independent helped manage the in-depth interview process as part of the study team's qualitative analyses of marketplace conditions.

**P. Dowell & Associates (PDA).** PDA is a minority woman-owned professional services firm based in Cerritos, California. PDA conducted in-depth interviews with California businesses as part of the study team's qualitative analyses of marketplace conditions.

# CHAPTER 2.

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## Marketplace Conditions

## CHAPTER 2.

# Marketplace Conditions

Historically, there have been myriad legal, economic, and social obstacles that have impeded minorities and women from acquiring the human and financial capital necessary to start and operate successful businesses. Barriers such as slavery, racial oppression, segregation, race-based displacement, and labor market discrimination produced substantial disparities for minorities (and women), the effects of which are still apparent today. Those barriers limited opportunities for minorities in terms of both education and workplace experience.<sup>1, 2, 3, 4</sup> Similarly, many women were restricted to either being homemakers or taking gender-specific jobs with low pay and little chance for advancement.<sup>5</sup>

Minorities and women in California faced similar barriers. For example, in the 19<sup>th</sup> and early 20<sup>th</sup> centuries, Chinese Americans and Japanese Americans were barred from entering California and were prevented from owning agricultural land.<sup>6</sup> Discriminatory treatment was also common for Black Americans in California. Non-Hispanic white Californians used violence, intimidation, and discriminatory public policy to force Black Americans to live in racially-segregated neighborhoods and attend racially-segregated schools.<sup>7, 8</sup> In addition, racially-motivated violence and displacement were common features of Native American life in California.<sup>9</sup> Disparate treatment of minorities and women also extended into the labor market. Mexican Americans were concentrated primarily in the migrant farmworker industry in California with little prospect for advancement and were commonly subjected to discriminatory treatment on the job.<sup>10</sup> Women also found it hard to gain a foothold in the labor market.

In the middle of the 20<sup>th</sup> century, many legal and workplace reforms opened up new opportunities for minorities and women. *Brown v. Board of Education*, *The Equal Pay Act*, *The Civil Rights Act*, and *The Women's Educational Equity Act* outlawed many forms of race- and gender-based discrimination. Workplaces adopted formalized personnel policies and implemented programs to diversify their staffs.<sup>11</sup> Those reforms increased diversity in workplaces and reduced educational and employment disparities for minorities and women<sup>12, 13, 14, 15</sup> However, despite those improvements, minorities and women continue to face barriers—such as incarceration, residential segregation, and family responsibilities—that have made it more difficult to acquire the human and financial capital necessary to start and operate businesses successfully.<sup>16, 17, 18</sup>

Federal Courts and the United States Congress have considered any barriers that minorities, women, and minority- and woman-owned businesses face in a local marketplace as evidence for the existence of race- and gender-based discrimination in that marketplace.<sup>19, 20, 21</sup> The United States Supreme Court and other federal courts have held that analyses of conditions in a local marketplace for minorities, women, and minority- and woman-owned businesses are instructive in determining whether agencies' implementations of minority- and woman-owned business programs are appropriate and justified. Those analyses help agencies determine whether they are *passively participating* in any race- or gender-based discrimination that makes it more

difficult for minority- and woman-owned businesses to successfully compete for their contracts. Passive participation in discrimination means that agencies unintentionally perpetuate race- or gender-based discrimination simply by operating within discriminatory marketplaces. Many courts have held that passive participation in any race- or gender-based discrimination establishes a *compelling governmental interest* for agencies to take remedial action to address such discrimination.<sup>22, 23, 24</sup>

The study team conducted quantitative and qualitative analyses to assess whether minorities, women, and minority- and woman-owned businesses face any barriers in the California construction and professional services industries. The study team also examined the potential effects that any such barriers have on the formation and success of minority- and woman-owned businesses; their participation in contracts that the California Department of Transportation awards; and their availability for that work. The study team examined local marketplace conditions primarily in four areas:

- **Human capital**, to assess whether minorities and women face any barriers related to education, employment, and gaining managerial experience in relevant industries;
- **Financial capital**, to assess whether minorities and women face any barriers related to wages, homeownership, personal wealth, and access to financing;
- **Business ownership**, to assess whether minorities and women own businesses at rates that are comparable to that of non-Hispanic white men; and
- **Success of businesses**, to assess whether minority- and woman-owned businesses have outcomes that are similar to those of businesses owned by non-Hispanic white men.

The information in Chapter 2 comes from existing research in the area of race- and gender-based discrimination as well as from primary research that the study team conducted of current marketplace conditions. Additional quantitative and qualitative analyses of marketplace conditions are presented in Appendix C and Appendix D, respectively. Chapter 2 is organized into 5 parts:

- A. Human Capital
- B. Financial Capital
- C. Business Ownership
- D. Business Success
- E. Summary

## A. Human Capital

Human capital is the collection of personal knowledge, behavior, experience, and characteristics that make up an individual's ability to perform and succeed in particular labor markets. Human capital factors such as education, business experience, and managerial experience have been shown to be related to business success.<sup>25, 26, 27, 28</sup> Any race- or gender-based barriers in those areas may make it more difficult for minorities and women to work in relevant industries and prevent some of them from starting and operating businesses successfully.

**Education.** Barriers associated with educational attainment may preclude entry or advancement in certain industries, because many occupations require at least a high school diploma, and some occupations—such as occupations in professional services—require at least a four-year college degree. In addition, educational attainment is a strong predictor of both income and personal wealth, which are both shown to be related to business formation and success.<sup>29, 30</sup> Nationally, minorities lag behind non-Hispanic whites in terms of both educational attainment and the quality of education that they receive.<sup>31, 32</sup> Minorities are far more likely than non-Hispanic whites to attend schools that do not provide access to core classes in science and math.<sup>33</sup> In addition, Black American students are more than three times more likely than non-Hispanic whites to be expelled or suspended from high school.<sup>34</sup> For those and other reasons, minorities are far less likely than non-Hispanic whites to attend college; enroll at highly or moderately selective four-year institutions; or earn college degrees.<sup>35</sup>

Educational outcomes for minorities in California are similar to those for minorities nationwide. In California public schools, Black Americans; Hispanic Americans; and American Indian and Alaska Natives exhibit substantially higher dropout rates than non-Hispanic whites.<sup>36</sup> In addition, the study team’s analyses of the California labor force indicates that certain minority groups are far less likely than non-Hispanic whites to earn a college degree. Figure 2-1 presents the percentage of California workers that have earned a four-year college degree by racial/ethnic and gender group. As shown in Figure 2-1, Black American, Hispanic American, Native American, and other race minority workers in California are substantially less likely than non-Hispanic white workers to have a four-year college degree.

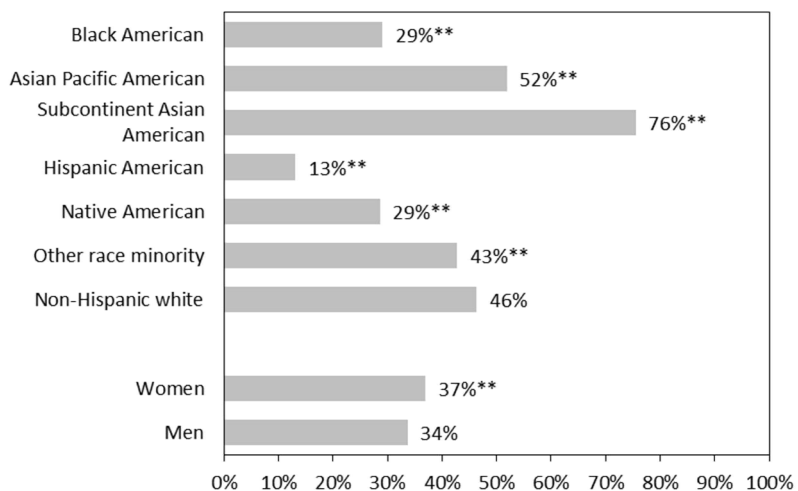
**Figure 2-1.**  
**Percentage of all workers 25**  
**and older with at least a**  
**four-year degree, California,**  
**2010-2014**

Note:

\*\* Denotes that the difference in proportions between the minority group and non-Hispanic whites (or between women and men) is statistically significant at the 95% confidence level.

Source:

BBC Research & Consulting from 2010-2014 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.



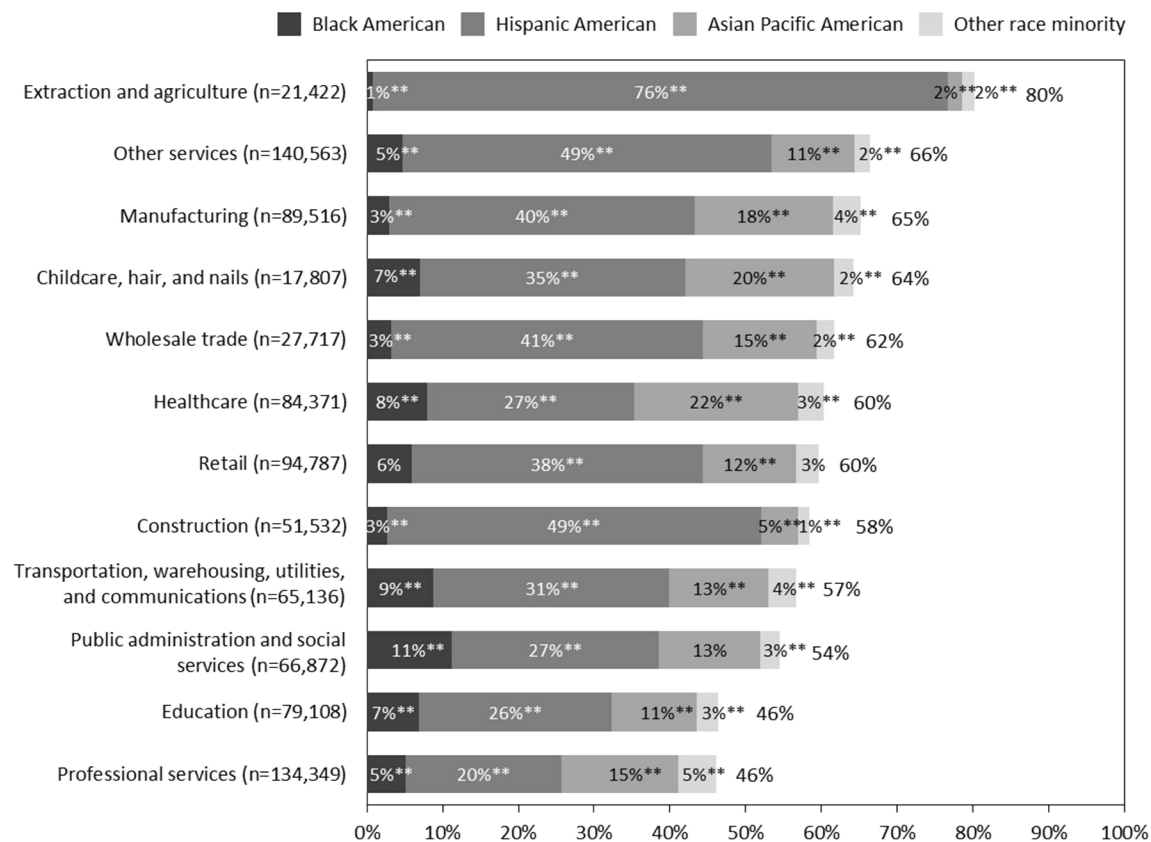
**Employment and management experience.** An important precursor to business ownership and success is acquiring direct work and management experience in relevant industries. Any barriers that limit minorities and women from acquiring that experience could prevent them from starting and operating related businesses in the future.

**Employment.** On a national level, prior industry experience has been shown to be an important indicator for business ownership and success. However, minorities and women are often unable to acquire relevant work experience. Minorities and women are sometimes discriminated against in hiring decisions, which impedes their entry into the labor market.<sup>37, 38, 39</sup> When

employed, minorities and women are often relegated to peripheral positions in the labor market and to industries that exhibit already high concentrations of minorities or women.<sup>40, 41, 42, 43</sup> In addition, minorities are incarcerated at a higher rate than non-Hispanic whites in California and nationwide, which contributes to a number of labor difficulties including difficulties finding jobs and slow wage growth.<sup>44, 45, 46, 47</sup>

The study team's analyses of the labor force in California is largely consistent with those findings. Figures 2-2 and 2-3 present the representations of minority and women workers in various California industries. As shown in Figures 2-2, the California industries with the highest representations of minority workers are extraction and agriculture; other services; and manufacturing. The California industries with the lowest representations of minority workers are public administration and social services; education; and professional services.

**Figure 2-2.**  
**Percent representation of minorities in various industries in California, 2010-2014**



Note: \*\* Denotes that the difference in proportions between minority workers in the specified industry and minority workers in all industries is statistically significant at the 95% confidence level.

The representation of minorities among all California workers is 5.9% for Black Americans, 13.5% for Asian Pacific Americans, 36.1% for Hispanic Americans, 3% for other race minorities, and 58.6% for all minorities considered together.

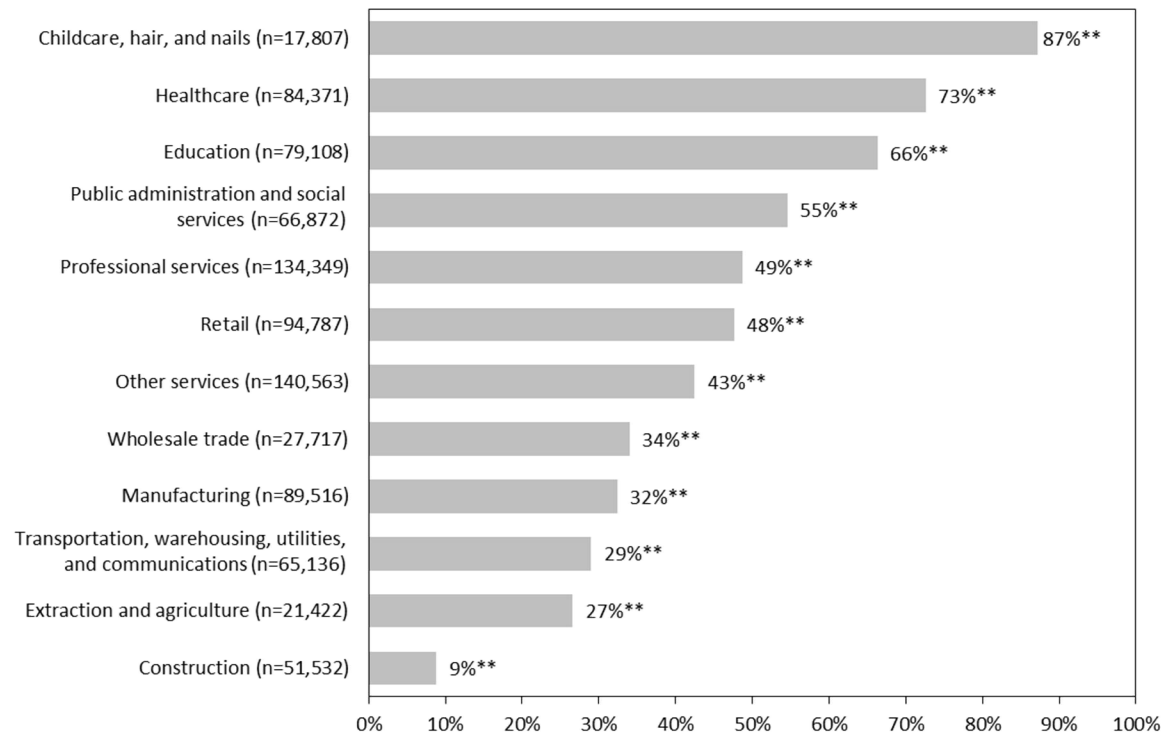
Workers in the finance, insurance, real estate, legal services, accounting, advertising, architecture, management, scientific research, and veterinary services industries were combined to one category of professional services. Workers in the rental and leasing; travel; investigation; waste remediation; arts; entertainment; recreation; accommodations; food services; and select other services were combined into one category of other services. Workers in child day care services, barber shops, beauty salons, nail salons, and other personal were combined into one category of childcare, hair, and nails.

Source: BBC Research & Consulting from 2010-2014 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.



Figures 2-3 indicates that the California industries with the highest representations of women workers are childcare, hair, and nails; healthcare; and education. The California industries with the lowest representations of women workers are transportation, warehousing, utilities, and communications; extraction and agriculture; and construction. In addition, the study team found that 94 percent of women who work in the California construction industry work in secretarial positions.

**Figure 2-3.**  
**Percent representation of women in various industries in California, 2010-2014**



Note: \*\* Denotes that the difference in proportions between women workers in the specified industry and women workers in all industries is statistically significant at the 95% confidence level.

The representation of women among all California workers is 45.7%.

Workers in the finance, insurance, real estate, legal services, accounting, advertising, architecture, management, scientific research, and veterinary services industries were combined to one category of professional services. Workers in the rental and leasing; travel; investigation; waste remediation; arts; entertainment; recreation; accommodations; food services; and select other services were combined into one category of other services. Workers in child day care services, barber shops, beauty salons, nail salons, and other personal were combined into one category of childcare, hair, and nails.

Source: BBC Research & Consulting from 2010-2014 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

**Management experience.** Managerial experience is an essential predictor of business success. However, race- and gender-based discrimination remains a persistent obstacle to greater diversity in management positions.<sup>48, 49, 50</sup> Nationally, minorities and women are far less likely than non-Hispanic white men to work in management positions.<sup>51, 52</sup> Similar outcomes appear to exist for minorities and women in California. The study team examined the concentration of minorities and women in management positions in the California construction and professional services industries. As shown in Figure 2-4:

- Compared to non-Hispanic whites, smaller percentages of Black Americans, Asian Pacific Americans, Hispanic Americans, Native Americans, and other race minorities work as managers in the California construction industry.
- Compared to non-Hispanic whites, smaller percentages of Asian Pacific Americans and Hispanic Americans work as managers in the California professional services industry. In addition, a smaller percentage of women than men work as managers in the California professional services industry.

**Figure 2-4.**  
**Percentage of California workers**  
**who worked as a manager in each**  
**study-related industry, 2010-2014**

Note:

\*\* Denotes that the difference in proportions between the minority group and non-Hispanic whites (or between women and men) is statistically significant at the 95% confidence level.

Source:

BBC Research & Consulting from 2010-2014 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

	Construction	Professional Services
<b>Race/ethnicity</b>		
Black American	4.2 % **	3.6 %
Asian Pacific American	10.4 **	2.4 **
Subcontinent Asian American	16.6	5.6
Hispanic American	2.8 **	2.3 **
Native American	6.9 **	8.6
Other race minority	7.4 **	2.1
Non-Hispanic white	13.7	4.5
<b>Gender</b>		
Women	7.4 %	2.0 % **
Men	7.9	4.5
<b>All individuals</b>	<b>7.8 %</b>	<b>3.9 %</b>

**Intergenerational business experience.** Having a family member who owns a business and is working in that business is an important predictor of business ownership and business success. Such experiences help entrepreneurs gain access to important opportunity networks; obtain knowledge of best practices and business etiquette; and receive hands-on experience in helping to run businesses. However, at least nationally, minorities have substantially fewer family members who own businesses and both minorities and women have fewer opportunities to be involved with those businesses. That lack of experience makes it more difficult for minorities and women to subsequently start their own businesses and operate them successfully.

## B. Financial Capital

In addition to human capital, financial capital has been shown to be an important indicator of business formation and success.<sup>53</sup> Individuals can acquire financial capital through a variety of sources including employment wages, personal wealth, homeownership, and financing. If race- or gender-based discrimination exists in those capital markets, minorities and women may have difficulty acquiring the capital necessary to start, operate, or expand businesses.

**Wages and income.** Wage and income gaps between minorities and non-Hispanic whites and between women and men are well-documented throughout the country, even when researchers have statistically controlled for various factors ostensibly unrelated to race and gender.<sup>54, 55, 56</sup> For example, national income data indicate that, on average, Black Americans and Hispanic Americans have household incomes that are less than two-thirds those of non-Hispanic whites.<sup>57, 58</sup> Women have also faced consistent wage and income gaps relative to men. Nationally,

the median hourly wage of women is still only 84 percent the median hourly wage of men.<sup>59</sup> Such disparities make it difficult for minorities and women to use employment wages as a source of business capital.

The study team observed wage gaps in California that are consistent with those that researchers have observed nationally. Figure 2-5 presents mean annual wages for California workers by race/ethnicity and gender. As shown in Figure 2-5, Black Americans, Asian Pacific Americans, Hispanic Americans, Native Americans, and other race minorities in California earn substantially less than non-Hispanic whites. In addition, women workers earn substantially less in wages than men. The study team also conducted regression analyses to determine whether those wage disparities exist even after statistically controlling for various race- and gender-neutral factors such as age, education, and family status. The results of those analyses indicated that being Black American, Asian Pacific American, Subcontinent Asian American, Hispanic American, Native American, or other minority was associated with substantially lower earnings than being non-Hispanic white, even after accounting for various race- and gender-neutral factors. Similarly, being a woman was associated with lower earnings than being a man (for details, see Figure C-10 in Appendix C).

**Figure 2-5.**  
**Mean annual wages**  
**among California workers,**  
**2010-2014**

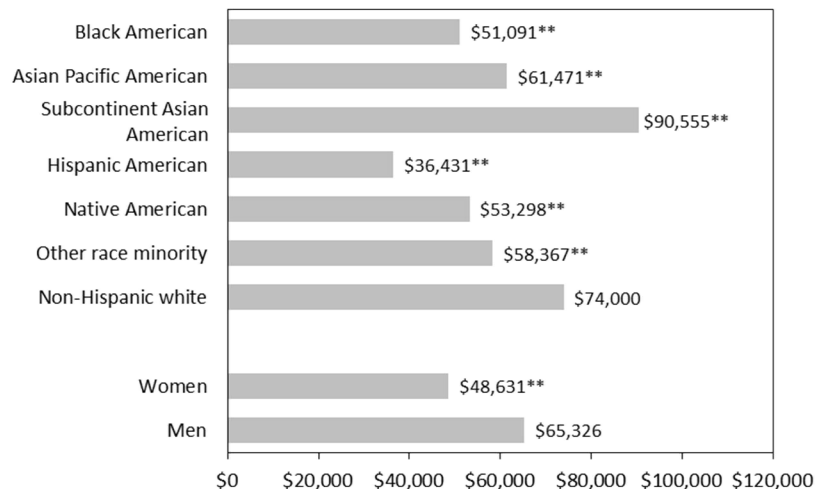
**Note:**

The sample universe is all non-institutionalized, employed individuals aged 25-64 that are not in school, the military, or self-employed.

\*\* Denotes statistically significant differences from non-Hispanic whites (for minority groups) or from men (for women) at the 95% confidence level.

**Source:**

BBC Research & Consulting from 2008-2012 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.



**Personal wealth.** Another important potential source of business capital is personal wealth. As with wages and income, there are substantial disparities between minorities and non-Hispanic whites and between women and men in terms of personal wealth.<sup>60, 61</sup> For example, in 2010, Black Americans and Hispanic Americans across the country exhibited average household net worth that was 5 percent and 1 percent, respectively, that of non-Hispanic whites. In California and nationwide, more than one-fifth of Black Americans and Hispanic Americans are living in poverty, approximately double the rate for non-Hispanic whites.<sup>62</sup> Wealth inequalities also exist for women relative to men. For example, the median wealth of non-married women nationally is approximately one-third that of non-married men.<sup>63</sup>

**Homeownership.** Homeownership and home equity have been shown to be key sources of business capital.<sup>64, 65</sup> However, minorities appear to face substantial barriers nationwide in owning homes. For example, Black Americans and Hispanic Americans own homes at less than

two-thirds the rate of non-Hispanic whites.<sup>66</sup> Discrimination is at least partly to blame for those disparities. Research indicates that minorities continue to be given less information on prospective homes and have their purchase offers rejected because of their race.<sup>67, 68</sup> Minorities who own homes tend to own homes that are worth substantially less than those of non-Hispanic whites and also tend to accrue substantially less equity.<sup>69, 70</sup> Differences in home values and equity between minorities and non-Hispanic whites can be attributed—at least, in part—to the depressed property values that tend to exist in racially-segregated neighborhoods.<sup>71, 72</sup>

Minorities appear to face homeownership barriers in California that are similar to those observed at the national level. The study team examined homeownership rates in California for relevant racial/ethnic groups. As shown in Figure 2-6, all relevant minority groups in California exhibit homeownership rates significantly lower than that of non-Hispanic whites.

**Figure 2-6.**  
**Home Ownership Rates in California, 2010-2014**

Note:

The sample universe is all households.

\*\* Denotes statistically significant differences from non-Hispanic whites at the 95% confidence level.

Source:

BBC Research & Consulting from 2010-2014 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

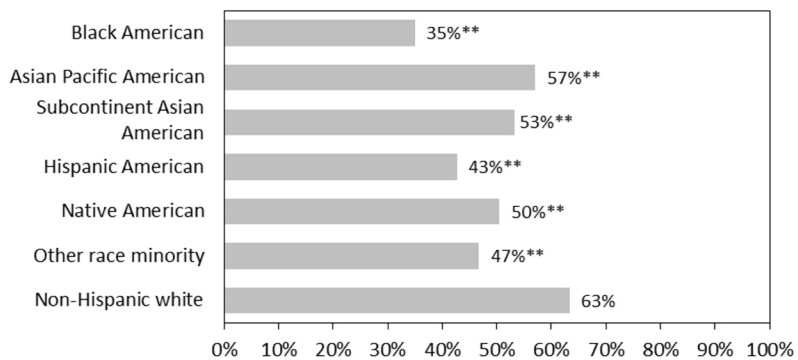


Figure 2-7 presents median home values among homeowners of different racial/ethnic groups in California. Consistent with national trends, homeowners of certain minority groups—Black Americans, Hispanic Americans, Native Americans, and other race minorities—own homes that, on average, are worth substantially less than those of non-Hispanic whites.

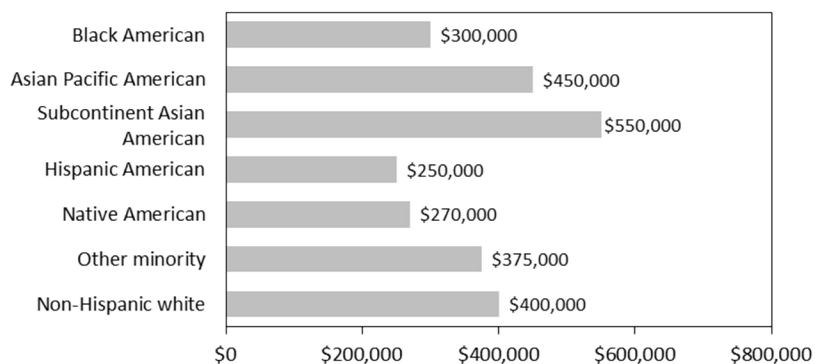
**Figure 2-7.**  
**Median home values in California, 2010-2014**

Note:

The sample universe is all owner-occupied housing units.

Source:

BBC Research & Consulting from 2010-2014 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.



**Access to financing.** Minorities and women face many barriers in trying to access credit and financing, both for home purchases and for business capital. Researchers have often attributed those barriers to various forms of race- and gender-based discrimination that exist in credit markets.<sup>73, 74, 75, 76, 77, 78</sup> The study team summarizes results related to difficulties that minorities, women, and minority- and woman-owned businesses face in the home credit and business credit markets.

**Home credit.** Minorities and women continue to face barriers when trying to access credit to purchase homes. Examples of such barriers include discriminatory treatment of minorities and women during the pre-application phase and disproportionate targeting of minority and women borrowers for subprime home loans.<sup>79, 80, 81, 82, 83</sup> Race- and gender-based barriers in home credit markets, as well as the recent foreclosure crisis, have led to decreases in homeownership among minorities and women and have eroded their levels of personal wealth.<sup>84, 85, 86, 87</sup>

To examine how minorities fare in the home credit market relative to non-Hispanic whites, the study team analyzed home loan denial rates for high-income households by race/ethnicity. The study team analyzed those data for California and the United States as a whole. As shown in Figure 2-8, Black Americans; Asian Americans; Hispanic Americans; Native Americans; and Native Hawaiian or Pacific Islanders exhibit higher home loan denial rates than non-Hispanic whites when considering the United States as a whole. Black Americans; Asian Americans; Hispanic Americans; Native Americans; and Native Hawaiian or Pacific Islanders also exhibit higher home loan denial rates than non-Hispanic whites when considering California alone. In addition, the study team's analyses indicate that certain minority groups in California are more likely than non-Hispanic whites to receive subprime mortgages (for details, see Figure C-15 in Appendix C).

**Business credit.** Minority- and woman-owned businesses face substantial difficulties accessing business credit. For example, researchers have shown that Black American-owned and Hispanic American-owned businesses are more likely to be denied business credit, even after accounting for various race- and gender-neutral factors.<sup>88, 89</sup> In addition, women are less likely to apply for credit and receive smaller loans.<sup>90, 91</sup> Without equal access to business capital, minority- and woman-owned businesses must rely more on personal finances for their business, which leaves them at a disadvantage when trying to start and operate successful businesses.<sup>92, 93, 94, 95</sup>

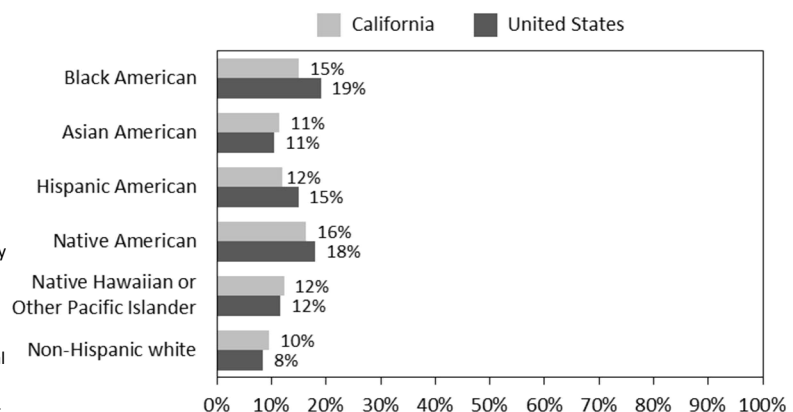
**Figure 2-8.**  
**Denial rates of conventional purchase loans for high-income households, California and the United States, 2014**

Note:

High-income borrowers are those households with 120% or more of the HUD area median family income (MFI).

Source:

FFIEC HMDA data 2007 and 2014. The raw data extract was obtained from the Consumer Financial Protection Bureau HMDA data tool: <http://www.consumerfinance.gov/hmda/explore>.



## C. Business Ownership

Nationally, there has been substantial growth in the number of minority- and woman-owned businesses over the past 40 years. For example, from 1975 to 1990, the number of woman-owned businesses increased by 145 percent, and the number of Hispanic American-owned businesses increased by nearly 200 percent.<sup>96</sup> Despite the progress that minorities and women have made with regard to business ownership, important barriers in starting and operating businesses remain. Black Americans, Hispanic Americans, and women are still less likely to start

businesses than non-Hispanic white men.<sup>97, 98, 99</sup> In addition, although rates of business ownership have increased among minorities and women, they have been unable to penetrate all industries evenly. Minorities and women disproportionately own businesses in industries that require less human and financial capital to be successful and that already include large concentrations of individuals from disadvantaged groups.<sup>100, 101</sup>

The study team examined rates of business ownership in the California construction and professional services industries by race/ethnicity and gender. As shown in Figure 2-9:

- Black Americans, Hispanic Americans, and Native Americans exhibit lower rates of business ownership than non-Hispanic whites in the California construction industry. In addition, women exhibit lower rates of business ownership than men.
- Black Americans, Asian Pacific Americans, Subcontinent Asian Americans, Hispanic Americans, and other race minorities exhibit lower rates of business ownership than non-Hispanic whites in the California professional services industry. In addition, women exhibit lower rates of business ownership than men in the California professional services industry.

**Figure 2-9.**  
**Business ownership rates in**  
**study-related industries in**  
**California, 2010-2014**

Note:

\*, \*\* Denote statistical significance at the 90% and 95% confidence levels, respectively.

Source:

BBC Research & Consulting from 2010-2014 ACS 5% Public Use Microdata samples. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

	Construction	Professional Services
<b>Race/ethnicity</b>		
Black American	20.1 % **	9.9 % **
Asian Pacific American	28.7	9.2 **
Subcontinent Asian American	23.2	12.4 **
Hispanic American	19.0 **	10.7 **
Native American	26.0 *	23.3
Other minority group	28.1	10.0 *
Non-Hispanic white	30.0	20.1
<b>Gender</b>		
Women	14.6 % **	11.6 % **
Men	25.1	17.9
<b>All individuals</b>	<b>24.2 %</b>	<b>16.2 %</b>

The study team also conducted regression analyses to determine whether differences in business ownership rates between minorities and non-Hispanic whites and between women and men exist even after statistically controlling for various race- and gender-neutral factors such as income, education, and familial status. The study team conducted those analyses separately for construction and professional services. Figure 2-10 presents the race/ethnicity and gender factors that were significantly related to business ownership for each industry.

**Figure 2-10.**  
**Statistically significant relationships between**  
**race/ethnicity and gender and business**  
**ownership in study-related industries in**  
**California, 2010-2014**

Source:

BBC Research & Consulting from 2010-2014 ACS 5% Public Use Microdata samples. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Industry and Group	Coefficient
<b>Construction</b>	
Black American	-0.2195
Hispanic American	-0.2159
Women	-0.5322
<b>Professional Services</b>	
Black American	-0.3589
Asian Pacific American	-0.4308
Subcontinent Asian American	-0.2399
Hispanic American	-0.1285
Women	-0.1877

As shown in Figure 2-10, even after accounting for race- and gender-neutral factors:

- Being Black American or Hispanic American was associated with lower rates of business ownership in construction. In addition, being a woman was associated with lower rates of business ownership in construction.
- Being Black American, Asian Pacific American, Subcontinent Asian American, or Hispanic American was associated with lower rates of business ownership in professional services. In addition, being a woman was associated with lower rates of business ownership in professional services.

Thus, disparities in business ownership rates between minorities and non-Hispanic whites and between women and men are not completely explained by differences in race- and gender-neutral factors such as income, education, and familial status. Disparities in business ownership rates exist for several groups in all relevant industries even after accounting for such factors.

## D. Business Success

There is a great deal of research indicating that, nationally, minority- and woman-owned businesses fare worse than businesses owned by non-Hispanic white men. For example, Black Americans, Native Americans, Hispanic Americans, and women exhibit higher rates of moving from business ownership to unemployment than non-Hispanic whites and men. In addition, minority- and woman-owned businesses have been shown to be less successful than businesses owned by non-Hispanic whites and men using a number of different indicators such as profits, closure rates, and business size (but also see Robb and Watson 2012).<sup>102, 103, 104</sup> The study team examined data on business closure, business receipts, and business owner earnings to further explore the success of minority- and woman-owned businesses in California.

**Business closure.** The study team examined the rates of closure among California businesses by the race/ethnicity and gender of the owners. Figure 2-11 presents those results. As shown in Figure 2-11, Black American-, Asian American-, and Hispanic American-owned businesses in California appear to close at higher rates than non-Hispanic white-owned businesses. In addition, woman-owned businesses in California appear to close at higher rates than businesses owned by men. Increased rates of business closure among minority- and woman-owned

businesses may have important effects on their availability for government contracts in California.

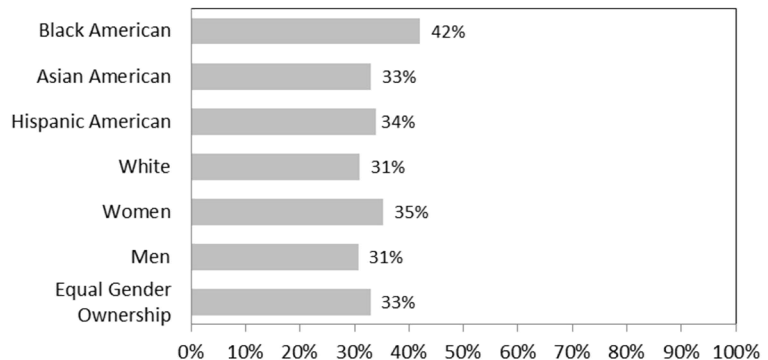
**Figure 2-11.**  
**Rates of business closure in California, 2002-2006**

Note:

Data include only to non-publicly held businesses.

Equal Gender Ownership refers to those businesses for which ownership is split evenly between women and men.

Statistical significance of these results cannot be determined, because sample sizes were not reported.



Source:

Lowrey, Ying. 2010. "Race/Ethnicity and Establishment Dynamics, 2002-2006." United States Small Business Administration Office of Advocacy. Washington D.C.

Lowrey, Ying. 2014. "Gender and Establishment Dynamics, 2002-2006." United States Small Business Administration Office of Advocacy. Washington D.C.

**Business receipts.** The study team also examined data on business receipts to assess whether minority- and woman-owned businesses in California earn as much as businesses owned by non-Hispanic whites or business owned by men, respectively. Figure 2-12 shows mean annual receipts for California business by the race/ethnicity and gender of owners. The data in Figure 2-12 indicate that in 2012 Black American-; Asian American-; Hispanic American-; American Indian and Alaskan Native-; and Native Hawaiian and Other Pacific Islander-owned businesses in California showed lower mean annual business receipts than businesses owned by non-Hispanic whites. In addition, woman-owned businesses in California showed lower mean annual business receipts than businesses owned by men.

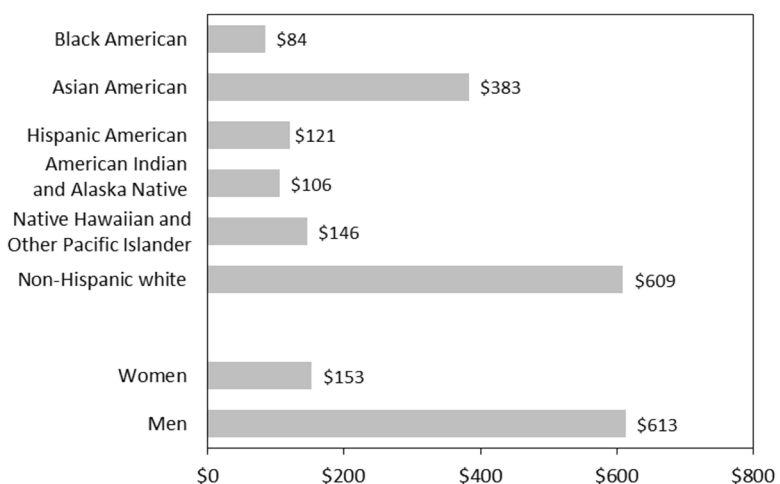
**Figure 2-12.**  
**Mean annual business receipts (in thousands) in California, 2012**

Note:

Includes employer and non-employer firms. Does not include publicly-traded companies or other firms not classifiable by race/ethnicity and gender.

Source:

2012 Survey of Business Owners, part of the United States Census Bureau's 2012 Economic Census.



**Business owner earnings.** The study team analyzed business owner earnings to assess whether minorities and women in California earn as much from the businesses that they own as non-Hispanic whites and men do. As shown in Figure 2-13, Black Americans, Asian American



Pacific American, Hispanic Americans, Native Americans, and other race minorities in California earned less on average from their businesses than non-Hispanic whites. In addition, women in California earned less from their businesses than men. The study team also conducted regression analyses to determine whether earnings disparities in California exist even after statistically controlling for various race- and gender-neutral factors such as age, education, and family status. The results of those analyses indicated that, compared to non-Hispanic white Americans in California, being Black American, Asian Pacific American, Hispanic American, or Native American was associated with significantly lower business earnings. In addition, being a woman was associated with substantially lower business owner earnings than being a man (for details, see Figure C-30 in Appendix C).

**Figure 2-13.**  
**Mean annual business owner in California, 2010-2014**

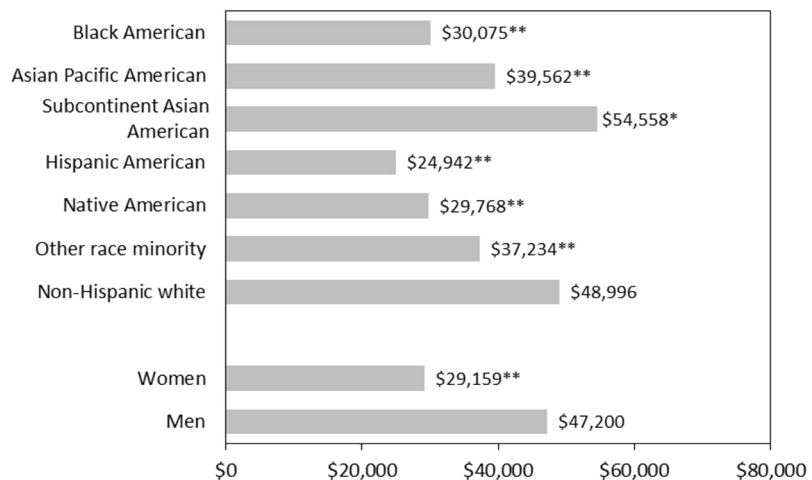
Note:

The sample universe is business owners age 16 and over who reported positive earnings. All amounts in 2014 dollars.

\*, \*\* Denote statistical significance at the 90% and 95% confidence levels, respectively.

Source:

BBC Research & Consulting from 2010-2014 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.



## E. Summary

The study team's analyses of marketplace conditions indicate that minorities, women, and minority- and woman-owned businesses face substantial barriers nationwide and in California. Existing research, as well as analyses that the study team conducted, indicate that race- and gender-based disparities exist in terms of acquiring human capital, accruing financial capital, owning businesses, and operating successful businesses. In many cases, there is evidence that those disparities exist even after accounting for various race- and gender-neutral factors such as age, income, education, and familial status. There is also evidence that many disparities are due—at least, in part—to race- and gender-based discrimination.

Barriers in the marketplace likely have important effects on the ability of minorities and women to start businesses in the California industries relevant to the disparity study—construction and professional services—and operating those businesses successfully. Any difficulties that minorities and women face in starting and operating businesses may reduce their availability for government agency work and may also reduce the degree to which they are able to successfully compete for government contracts. In addition, the existence of barriers in the California marketplace indicates that government agencies in the state are passively participating in race- and gender-based discrimination that makes it more difficult for minority- and woman-owned businesses to successfully compete for their contracts. Many courts have held that passive participation in any race- or gender-based discrimination establishes a compelling governmental interest for agencies to take remedial action to address such discrimination.

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- <sup>1</sup>Haney-López, Ian. 2006. *White by Law: The Legal Construction of Race*. New York: NYU Press.
- <sup>2</sup>Woodward, Comer Vann. 1955. *The Strange Career of Jim Crow*. Oxford: Oxford University Press.
- <sup>3</sup>Prucha, Francis Paul. 1986. *The Great Father: The United States Government and the American Indians*. Lincoln: University of Nebraska Press.
- <sup>4</sup>Lee, Erika. 2003. *At America's Gates: Chinese Immigration During the Exclusion Era, 1882-1943*. Chapel Hill, NC: University of North Carolina Press.
- <sup>5</sup>Goldin, Claudia. 2006. "The Quiet Revolution That Transformed Women's Employment, Education, and Family." *The American Economic Review* 96(2):1-21.
- <sup>6</sup>Lee, Erika. 2015. *The Making of Asian America: A History*. New York, NY: Simon & Schuster.
- <sup>7</sup>Sides, Josh. 2003. *L.A. City Limits: African American Los Angeles from the Great Depression to the Present*. Los Angeles, CA: University of California Press.
- <sup>8</sup>Wollenberg, Charles. 1978. *All Deliberate Speed. Segregation and Exclusion in California Schools, 1855-1975*. Los Angeles, CA: University of California Press.
- <sup>9</sup>Lindsay, Brenda C. 2012. *Murder State: California's Native American Genocide, 1846-1873*. Lincoln, NE: University of Nebraska Press.
- <sup>10</sup>Flores, Lori A. 2016. *Grounds for Dreaming: Mexican Americans, Mexican Immigrants, and the California Farm Worker Movement*. New Haven, CT: Yale University Press.
- <sup>11</sup>Dobbin, Frank. 2009. *Inventing Equal Opportunity*. Princeton: Princeton University Press.
- <sup>12</sup>Holzer, Harry and David Neumark. 2000. "Assessing Affirmative Action." *Journal of Economic Literature* 38(3):483-568.
- <sup>13</sup>Kalev, Alexandra, Frank Dobbin, and Erin Kelly. 2006. "Best Practices or Best Guesses? Assessing the Efficacy of Corporate Affirmative Action and Diversity Policies." *American Sociological Review* 71(4):589-617.
- <sup>14</sup>Kao, Grace and Jennifer S. Thompson. 2003. "Racial and Ethnic Stratification in Educational Achievement and Attainment." *Annual Review of Sociology* 29(1):417-42.
- <sup>15</sup>DiPrete, Thomas A. and Claudia Buchmann. 2013. *The Rise of Women: The Growing Gender Gap in Education and What It Means for American Schools*. New York: Russell Sage Foundation.
- <sup>16</sup>Travis, Jeremy, Bruce Western, and Steve Redburn. 2014. *The Growth of Incarceration in the United States: Exploring Causes and Consequences*. National Research Council. Washington D.C.: Division of Behavioral and Social Sciences and Education. Retrieved January 6, 2015 ([http://www.nap.edu/booksearch.php?booksearch=1&record\\_id=18613&term=Black&chapter=33-69](http://www.nap.edu/booksearch.php?booksearch=1&record_id=18613&term=Black&chapter=33-69)).
- <sup>17</sup>Charles, Camille Zubrinsky. 2003. "The Dynamics of Racial Residential Segregation." *Annual Review of Sociology* 29:167-207.
- <sup>18</sup>Bianchi, Suzanne M., Liana C. Sayer, Melissa A. Milkie, and John P. Robinson. 2012. "Housework: Who Did, Does or Will Do It, and How Much Does It Matter?" *Social Forces* 91(1):55-63.
- <sup>19</sup>*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"); *Midwest Fence Corp. v. U.S. DOT, Illinois DOT, et al.*, 2015 WL 1396376, *appeal pending*.
- <sup>20</sup>*Adarand VII*, 228 F.3d at 1168-70; *Western States Paving*, 407 F.3d at 992; *see DynaLantic*, 885 F.Supp.2d 237; *Midwest Fence Corp. v. U.S. DOT, Illinois DOT, et al.*, 2015 WL 1396376, *appeal pending*; *Geyer Signal*, 2014 WL 130909297 at \*14.
- <sup>21</sup>*Adarand VII* at 1170-72; *see DynaLantic*, 885 F.Supp.2d 237; *Geyer Signal*, 2014 WL 1309092 at \*14.
- <sup>22</sup>*City of Richmond v. J.A. Croson Co.*, 488 U.S. 469 (1989).
- <sup>23</sup>*Concrete Works of Colo., Inc. v. City and County of Denver*, 36 F.3d 1513, 1524 (10th Cir. 1994).
- <sup>24</sup>*Rothe Development Corp v. U.S. Dept of Defense*, 545 F.3d 1023, 1041.
- <sup>25</sup>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.
- <sup>26</sup>Fairlie, Robert W. and Alicia M. Robb. 2008. *Race and Entrepreneurial Success: Black-, Asian-, and White-Owned Businesses in the United States*. Cambridge, Mass.: MIT Press.
- <sup>27</sup>Fairlie, Robert W. and Alicia M. Robb. 2009. "Gender Differences in Business Performance: Evidence From the Characteristics of Business Owners Survey." *Small Business Economics* 33(4):375-95.

- 
- <sup>28</sup> Hout, Michael and Harvey Rosen. 2000. "Self-Employment, Family Background, and Race." *Journal of Human Resources* 35(4):670–92.
- <sup>29</sup> Emmons, William R. and Bryan J. Noeth. 2015. *Why Didn't Higher Education Protect Hispanic and Black Wealth?* St. Louis, MO: Center for Household Financial Stability. Retrieved August 20, 2015 ([https://www.stlouisfed.org/~media/Publications/In%20the%20Balance/Images/Issue\\_12/ITB\\_August\\_2015.pdf](https://www.stlouisfed.org/~media/Publications/In%20the%20Balance/Images/Issue_12/ITB_August_2015.pdf)).
- <sup>30</sup> Shapiro, Thomas, Tatjana Meschede, and Sam Osoro. 2013. *The Roots of the Widening Racial Wealth Gap: Explaining the Black-White Economic Divide*. Waltham, MA: Institute on Assets and Social Policy. Retrieved January 2, 2015 (<http://iasp.brandeis.edu/pdfs/Author/shapiro-thomas-m/racialwealthgapbrief.pdf>).
- <sup>31</sup> National Center for Education Statistics. 2010. *Status and Trends in the Education of Racial and Ethnic Minorities*. National Center for Education Statistics. Retrieved January 20, 2015 (<http://nces.ed.gov/pubs2010/2010015/tables.asp>).
- <sup>32</sup> Kao, Grace and Jennifer S. Thompson. 2003. "Racial and Ethnic Stratification in Educational Achievement and Attainment." *Annual Review of Sociology* 29(1):417–42.
- <sup>33</sup> U.S. Department of Education Office for Civil Rights. 2014a. *College and Career Readiness*. Washington D.C.: U.S. Department of Education. Retrieved January 3, 2015 (<http://www2.ed.gov/about/offices/list/ocr/docs/crdc-college-and-career-readiness-snapshot.pdf>).
- <sup>34</sup> U.S. Department of Education Office for Civil Rights. 2014b. *School Discipline, Restraint, and Seclusion Highlights*. Washington D.C.: U.S. Department of Education. Retrieved January 3, 2015 (<http://ocrdata.ed.gov/Downloads/CRDC-School-Discipline-Snapshot.pdf>).
- <sup>35</sup> Bozick, Robert and Erich Lauff. 2007. Education Longitudinal Study of 2002 (ELS:2002): *A First Look at the Initial Postsecondary Experiences of the High School Sophomore Class of 2002*. National Center for Education Statistics. Retrieved January 20, 2015 (<http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2008308>).
- <sup>36</sup> Stillwell, Robert and Jennifer Sable. 2013. *Public School Graduates and Dropouts from the Common Core of Data: School Year 2009–10*. National Center for Education Statistics. Retrieved October 11, 2015 (<http://nces.ed.gov/pubs2013/2013309rev.pdf>).
- <sup>37</sup> Correll, Shelley J., Stephen Benard, and In Paik. 2007. "Getting a Job: Is There a Motherhood Penalty?" *American Journal of Sociology* 112(5):1297–1339.
- <sup>38</sup> Pager, Devah, Bruce Western, and Bart Bonikowski. 2009. "Discrimination in a Low-Wage Labor Market A Field Experiment." *American Sociological Review* 74(5):777–99.
- <sup>39</sup> Bertrand, Marianne and Sendhil Mullainathan. 2004. "Are Emily and Greg More Employable Than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination." *American Economic Review* 94(4):991–1013.
- <sup>40</sup> Beck, E. M., Patrick M. Horan, and Charles M. Tolbert II. 1980. "Industrial Segmentation and Labor Market Discrimination." *Social Problems* 28(2):113–30.
- <sup>41</sup> Catanzarite, Lisa. 2003. "Race-Gender Composition and Occupational Pay Degradation." *Social Problems* 50(1):14–37.
- <sup>42</sup> Cohen, Philip N. and Matt L. Huffman. 2003. "Occupational Segregation and the Devaluation of Women's Work across U.S. Labor Markets." *Social Forces* 81(3):881–908.
- <sup>43</sup> Huffman, Matt L. and Philip N. Cohen. 2004. "Racial Wage Inequality: Job Segregation and Devaluation across U.S. Labor Markets." *American Journal of Sociology* 109(4):902–36.
- <sup>44</sup> Travis, Jeremy, Bruce Western, and Steve Redburn. 2014. *The Growth of Incarceration in the United States: Exploring Causes and Consequences*. National Research Council. Washington D.C.: Division of Behavioral and Social Sciences and Education. Retrieved January 6, 2015 ([http://www.nap.edu/booksearch.php?booksearch=1&record\\_id=18613&term=Black&chapter=33-69](http://www.nap.edu/booksearch.php?booksearch=1&record_id=18613&term=Black&chapter=33-69)).
- <sup>45</sup> Grattet, Ryan and Joseph Hayes. 2015. "California's Changing Prison Population." San Francisco, CA: Public Policy Institute of California. Retrieved May 1, 2016 ([http://www.ppic.org/main/publication\\_show.asp?i=702](http://www.ppic.org/main/publication_show.asp?i=702)).
- <sup>46</sup> Pager, Devah. 2003. "The Mark of a Criminal Record." *American Journal of Sociology* 108(5):937–75.
- <sup>47</sup> Western, Bruce and Becky Pettit. 2010. "Incarceration & Social Inequality." *Daedalus* 139(3):8–19.
- <sup>48</sup> Wilson, George and Debra Branch McBrier. 2005. "Race and Loss of Privilege: African American/White Differences in the Determinants of Job Layoffs From Upper-Tier Occupations." *Sociological Forum* 20(2):301–21.
- <sup>49</sup> Roscigno, Vincent J., Lisette M. Garcia, and Donna Bobbitt-Zeher. 2007. "Social Closure and Processes of Race/Sex Employment Discrimination." *The Annals of the American Academy of Political and Social Science* 609 (1): 16–48.

- 
- <sup>50</sup> Roscigno, Vincent J. Lisa M. Williams, and Reginald A. Byron. 2012. "Workplace Racial Discrimination and Middle Class Vulnerability." *American Behavioral Scientist* 56(5):696-710.
- <sup>51</sup> Smith, Ryan A. 2002. "Race, Gender, and Authority in the Workplace: Theory and Research." *Annual Review of Sociology* 28:509-42.
- <sup>52</sup> Wilson, George. 1997. "Pathways to Power: Racial Differences in the Determinants of Job Authority." *Social Problems* 44(1):38-54.
- <sup>53</sup> Robb, Alicia and Robert Fairlie. 2007. "Access to Financial Capital among U.S. Businesses: The Case of African American Firms." *The Annals of the American Academy of Political and Social Science* 613(1):47-72.
- <sup>54</sup> Cha, Youngjoo and Kim A. Weeden. 2014. "Overwork and the Slow Convergence in the Gender Gap in Wages." *American Sociological Review* 79(3):457-84.
- <sup>55</sup> McCall, Leslie. 2001. "Sources of Racial Wage Inequality in Metropolitan Labor Markets: Racial, Ethnic, and Gender Differences." *American Sociological Review* 66(4):520-41.
- <sup>56</sup> Tomaskovic-Devey, Donald. 1993b. "The Gender and Race Composition of Jobs and the Male/Female, White/Black Pay Gaps." *Social Forces* 72(1):45-76.
- <sup>57</sup> Economic Policy Institute. 2012a. *African Americans*. Washington D.C.: Economic Policy Institute. Retrieved January 20, 2015 (<http://stateofworkingamerica.org/files/book/factsheets/african-americans.pdf>).
- <sup>58</sup> Economic Policy Institute. 2012b. *Latinos*. Washington D.C.: Economic Policy Institute. Retrieved January 20, 2015 (<http://www.stateofworkingamerica.org/fact-sheets/latinos/>).
- <sup>59</sup> Economic Policy Institute. 2012c. *Women*. Washington D.C.: Economic Policy Institute. Retrieved January 20, 2015 (<http://www.stateofworkingamerica.org/fact-sheets/women/>).
- <sup>60</sup> Shapiro, Thomas, Tatjana Meschede, and Sam Osoro. 2013. *The Roots of the Widening Racial Wealth Gap: Explaining the Black-White Economic Divide*. Waltham, MA: Institute on Assets and Social Policy. Retrieved January 2, 2015 (<http://iasp.brandeis.edu/pdfs/Author/shapiro-thomas-m/racialwealthgapbrief.pdf>).
- <sup>61</sup> Sullivan, Laura, Tatjana Meschede, Lars Dietrich, Thomas Shapiro, Amy Traub, Catherine Ruetschlin, and Tamara Draut. 2015. *The Racial Wealth Gap: Why Policy Matters*. New York: Demos. Retrieved August 28, 2015 ([http://www.demos.org/sites/default/files/publications/RacialWealthGap\\_1.pdf](http://www.demos.org/sites/default/files/publications/RacialWealthGap_1.pdf)).
- <sup>62</sup> Kaiser Health Foundation. 2015. "Poverty by Race/Ethnicity." Retrieved May 10, 2016 (<http://kff.org/other/state-indicator/poverty-rate-by-raceethnicity/>).
- <sup>63</sup> Chang, Mariko Lin. 2010. *Shortchanged: Why Women Have Less Wealth and What Can Be Done About It*. Oxford: Oxford University Press.
- <sup>64</sup> 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 & Finance* 22(6-8):613-73.
- <sup>65</sup> Fairlie, Robert W. and Harry A. Krashinsky. 2012. "Liquidity Constraints, Household Wealth, and Entrepreneurship Revisited." *Review of Income & Wealth* 58(2):279-306.
- <sup>66</sup> U. S. Census Bureau. 2013a. "American Community Survey 2013 1 Year Estimates." Retrieved January 20, 2015 (<http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>).
- <sup>67</sup> Turner, Margery Austen, Rob Santos, and Diane K. Levy, Doug Wissoker, Claudia Aranda, and Rob Pitingolo. 2013. *Housing Discrimination Against Racial and Ethnic Minorities 2012*. Washington, D.C.: U.S. Department of Housing and Urban Development. Retrieved January 2, 2015 ([http://www.huduser.org/portal/publications/fairhsg/hsg\\_discrimination\\_2012.html](http://www.huduser.org/portal/publications/fairhsg/hsg_discrimination_2012.html)).
- <sup>68</sup> Roscigno, Vincent J., Diana L. Karafin, and Griff Tester. 2009. "The Complexities and Processes of Racial Housing Discrimination." *Social Problems* 56(1): 49-69.
- <sup>69</sup> Kochhar, Rakesh and Richard Fry. 2014. "Wealth Inequality Has Widened along Racial, Ethnic Lines since End of Great Recession." *Pew Research Center*. Retrieved December 29, 2014 (<http://www.pewresearch.org/fact-tank/2014/12/12/racial-wealth-gaps-great-recession/>).
- <sup>70</sup> Burd-Sharps, Sarah and Rebecca Rasch. 2015. *Impact of the US Housing Crisis on the Racial Wealth Gap Across Generations*. Brooklyn, NY: Social Science Research Council. Retrieved June 23, 2015 (<http://www.ssrc.org/publications/view/129CDF74-1F11-E511-940A-005056AB4B80/>).
- <sup>71</sup> Charles, Camille Zubrinsky. 2003. "The Dynamics of Racial Residential Segregation." *Annual Review of Sociology* 29:167-207.
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- 
- <sup>72</sup> Shapiro, Thomas, Tatjana Meschede, and Sam Osoro. 2013. *The Roots of the Widening Racial Wealth Gap: Explaining the Black-White Economic Divide*. Waltham, MA: Institute on Assets and Social Policy. Retrieved January 2, 2015 (<http://iasp.brandeis.edu/pdfs/Author/shapiro-thomas-m/racialwealthgapbrief.pdf>).
- <sup>73</sup> Blanchard, Lloyd, Bo Zhao, and John Yinger. 2008. "Do Lenders Discriminate Against Minority and Woman Entrepreneurs?" *Journal of Urban Economics* 63(2):467–97.
- <sup>74</sup> Cavalluzzo, Ken S., Linda C. Cavalluzzo, and John D. Wolken. 2002. "Competition, Small Business Financing, and Discrimination: Evidence from a New Survey." *The Journal of Business* 75(4):641–79.
- <sup>75</sup> Cavalluzzo, Ken and John Wolken. 2005. "Small Business Loan Turndowns, Personal Wealth, and Discrimination." *The Journal of Business* 78(6):2153–78.
- <sup>76</sup> Gruenstein Bocian, Debbie, Wei Li, Carolina Reid, and Robert G. Quercia. 2011. *Lost Ground, 2011: Disparities in Mortgage Lending and Foreclosures*. Washington D.C.: Center for Responsible Lending. Retrieved January 21, 2015.
- <sup>77</sup> Mijid, Naranchimeg and Alexandra Bernasek. 2013. "Gender and the Credit Rationing of Small Businesses." *The Social Science Journal* 50(1):55–65.
- <sup>78</sup> Ross, Stephen L. and John Yinger. 2002. *The Color of Credit: Mortgage Discrimination, Research Methodology, and Fair-Lending Enforcement*. Cambridge, MA: MIT Press.
- <sup>79</sup> Ross, Stephen L., Margery Austin Turner, Erin Godfrey, and Robin R. Smith. 2008. "Mortgage Lending in Chicago and Los Angeles: A Paired Testing Study of the Pre-Application Process." *Journal of Urban Economics* 63(3):902–19.
- <sup>80</sup> Dymski, Gary, Jesus Hernandez, and Lisa Mohanty. 2013. "Race, Gender, Power, and the US Subprime Mortgage and Foreclosure Crisis: A Meso Analysis." *Feminist Economics* 19(3):124–51.
- <sup>81</sup> Fishbein, Allen J. and Patrick Woodall. 2006. *Women are Prime Targets Subprime: Women Are Disproportionately Represented in High-Cost Mortgage Market*. Washington D.C.: Consumer Federation of America. Retrieved January 5, 2015 ([http://policylinkcontent.s3.amazonaws.com/WomenPrimeTargetsSubprimeLending\\_CFA\\_0.pdf](http://policylinkcontent.s3.amazonaws.com/WomenPrimeTargetsSubprimeLending_CFA_0.pdf)).
- <sup>82</sup> Williams, Richard, Reynold Nesiba, and Eileen Diaz McConnell. 2005. "The Changing Face of Inequality in Home Mortgage Lending." *Social Problems* 52(2):181–208.
- <sup>83</sup> Wyly, Elvin and C. S. Ponder. 2011. "Gender, Age, and Race in Subprime America." *Housing Policy Debate* 21(4):529–64.
- <sup>84</sup> Baker, Amy Castro. 2011. *Tearing Down the Wealth of Women*. New York: Women's Media Center. Retrieved January 5, 2015 (<http://www.womensmediacenter.com/feature/entry/tearing-down-the-wealth-of-women>).
- <sup>85</sup> Baker, Amy Castro. 2014. "Eroding the Wealth of Women: Gender and the Subprime Foreclosure Crisis." *Social Service Review* 88(1):59–91.
- <sup>86</sup> Rugh, Jacob S. and Douglas S. Massey. 2010. "Racial Segregation and the American Foreclosure Crisis." *American Sociological Review* 75(5):629–51.
- <sup>87</sup> Burd-Sharps, Sarah and Rebecca Rasch. 2015. *Impact of the US Housing Crisis on the Racial Wealth Gap Across Generations*. Brooklyn, NY: Social Science Research Council. Retrieved June 23, 2015 (<http://www.ssrc.org/publications/view/129CDF74-1F11-E511-940A-005056AB4B80/>).
- <sup>88</sup> Blanchard, Lloyd, Bo Zhao, and John Yinger. 2008. "Do Lenders Discriminate Against Minority and Woman Entrepreneurs?" *Journal of Urban Economics* 63(2):467–97.
- <sup>89</sup> 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(4):930–43.
- <sup>90</sup> Mijid, Naranchimeg and Alexandra Bernasek. 2013. "Gender and the Credit Rationing of Small Businesses." *The Social Science Journal* 50(1):55–65.
- <sup>91</sup> Treichel, Monica Zimmerman and Jonathan A. Scott. 2006. "Women-Owned Businesses and Access to Bank Credit: Evidence from Three Surveys Since 1987." *Venture Capital* 8(1):51–67.
- <sup>92</sup> Coleman, Susan and Alicia Robb. 2009. "A Comparison of New Firm Financing by Gender: Evidence from the Kauffman Firm Survey Data." *Small Business Economics* 33(4):397–411.
- <sup>93</sup> Robb, Alicia and Robert Fairlie. 2007. "Access to Financial Capital among U.S. Businesses: The Case of African American Firms." *The Annals of the American Academy of Political and Social Science* 613(1):47–72.
- <sup>94</sup> Robb, Alicia M., Robert W. Fairlie, and David T. Robinson. 2009. *Patterns of Financing: A Comparison between White- and African-American Young Firms*. Kansas City, MO: Ewing Marion Kauffman Foundation. Retrieved January 21, 2015 (<http://www.kauffman.org/what-we-do/research/kauffman-firm-survey-series/patterns-of-financing-a-comparison-between-white-and-africanamerican-young-firms>).

- 
- <sup>95</sup> Fairlie, Robert W. and Harry A. Krashinsky. 2012. "Liquidity Constraints, Household Wealth, and Entrepreneurship Revisited." *Review of Income & Wealth* 58(2):279–306.
- <sup>96</sup> Blanchflower, David G. 2008. *Minority Self-Employment in the United States and the Impact of Affirmative Action Programs*. Cambridge, MA: National Bureau of Economic Research, Retrieved January 15, 2015 (<http://www.nber.org/papers/w13972>).
- <sup>97</sup> Fairlie, Robert W. and Alicia M. Robb. 2009b. "Gender Differences in Business Performance: Evidence from the Characteristics of Business Owners Survey." *Small Business Economics* 33(4):375–95.
- <sup>98</sup> Fairlie, Robert W. 2006. "Entrepreneurship among Disadvantaged Groups: Women, Minorities, and the Less Educated." Pp. 437–75 in *The Life Cycle of Entrepreneurial Ventures*, edited by Simon Parker. Springer Science & Business Media.
- <sup>99</sup> Fairlie, Robert W. and Alicia M. Robb. 2008. *Race and Entrepreneurial Success: Black-, Asian-, and White-Owned Businesses in the United States*. Cambridge, Mass.: MIT Press.
- <sup>100</sup> Budig, Michelle J. 2006b. "Intersections on the Road to Self-Employment: Gender, Family and Occupational Class." *Social Forces* 84(4):2223–39.
- <sup>101</sup> Lofstrom, Magnus and Timothy Bates. 2013. "African Americans' Pursuit of Self-Employment." *Small Business Economics* 40(1):73–86.
- <sup>102</sup> Fairlie, Robert W. and Alicia M. Robb. 2008. *Race and Entrepreneurial Success: Black-, Asian-, and White-Owned Businesses in the United States*. Cambridge, Mass.: MIT Press.
- <sup>103</sup> Coleman, Susan and Alicia Robb. 2009. "A Comparison of New Firm Financing by Gender: Evidence from the Kauffman Firm Survey Data." *Small Business Economics* 33(4):397–411.
- <sup>104</sup> Robb, Alicia M. and John Watson. 2012. "Gender Differences in Firm Performance: Evidence from New Ventures in the United States." *Journal of Business Venturing* 27(5):544–58.

# **CHAPTER 3.**

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## **Methodology, Data Sources, and Assumptions**

# CHAPTER 3.

## Methodology, Data Sources, and Assumptions

Chapter 3 provides an overview of the California Department of Transportation (Caltrans) contracts included in the study and describes the methodology that the study team used to collect information on prime contracts and subcontracts. Chapter 3 also discusses the types of work involved in Caltrans contracts and the locations of the businesses that performed those contracts. Chapter 3 is organized into six parts:

- A. Overview of Caltrans transportation contracts;
- B. Collection and analysis of Caltrans contract data;
- C. Collection of information on vendors that participated in Caltrans contracts;
- D. Types of work involved in Caltrans contracts;
- E. Locations of businesses that perform Caltrans work; and
- F. Assumptions in the collection and analysis of Caltrans contract data.

### A. Overview of Caltrans Transportation Contracts

Caltrans uses Federal Highway Administration (FHWA) and state funding to fund transportation-related construction and professional services projects throughout California. Examples of such projects include constructing new highways, resurfacing roads, and improving bridges. Construction contracts typically involve a prime contractor and several subcontractors. Caltrans' Office Engineer (OE) awards construction contracts worth more than \$291,000 and the Division of Procurement and Contracts (DPAC) awards construction contracts worth less than \$291,000 as well as professional services contracts and emergency contracts. For projects that require an engineering or design phase, Caltrans sometimes retains a professional services prime consultant. Professional services prime consultants may retain subconsultants to perform specialized work on design projects such as surveying or mapping.

Caltrans also administers the Local Assistance Program using FHWA and state funds. As part of the program, Caltrans' Division of Local Assistance (DLA) oversees funding to more than 600 cities, counties, and regional agencies for the purpose of improving their transportation infrastructures and providing transportation services. Local agencies that receive the funding are responsible for awarding and administering the resulting contracts. Caltrans also administers some FHWA and state funds through other department divisions including the Division of Transportation Planning (DTP).

### B. Collection and Analysis of Caltrans Contract Data

The study team examined contracts that Caltrans and subrecipient local agencies awarded between January 1, 2011 and December 31, 2014. The study team worked closely with Caltrans staff to collect data on Caltrans FHWA- and state-funded transportation construction and



professional services prime contracts and subcontracts. Caltrans provided information on whether each contract was FHWA-funded.<sup>1</sup> The study team also coordinated with local department staff to collect data on contracts that local agencies let using pass-through FHWA grants from Caltrans.

**Caltrans OE.** OE data collection began with project initiation in July 2015. BBC staff met with staff from OE to determine what types of data were available during the study period. OE staff provided BBC with a list of prime contracts that the office awarded during the study period. OE also provided BBC with a partial list of subcontractors that prime contractors used on each contract. Because data on subcontracts were not complete, the study team collected that information from hard copy forms Caltrans maintains. BBC worked with the Office of Business & Economic Opportunity (OBE) and OE to determine the most appropriate forms to use to establish the most complete list of subcontractors. The study team and OBE determined that three forms were appropriate for use in subcontractor data collection:

- CEM-1201: Subcontracting Request;
- CEM-2402: Final Report – Utilization of Disadvantaged Business Enterprises First-tier Subcontractors; and
- ADM-3027: Small Business (SB) Participation Report.

For the purposes of developing a list of subcontracts, BBC used all subcontractor data from CEM-1201 forms. BBC only used subcontractor data from CEM-2402 forms if certain subcontractors did not appear on CEM-1201 forms for specific contracts. BBC only used subcontractor data from ADM-3027 forms if certain subcontracts did not appear on either the CEM-1201 or the CEM-2402 forms for specific contracts.

Beginning in early February 2016, Caltrans reviewed the prime contract and subcontract data that the study team compiled from OE. The study team updated information about OE contracts based on Caltrans' review.

**Caltrans DPAC architecture & engineering (A&E) contracts.** Data collection for DPAC A&E contracts also began at project initiation in July 2015. BBC met with DPAC to discuss available data for engineering contracts that DPAC awarded during the study period. DPAC provided information on all prime contracts. However, the division did not maintain complete information on subcontracts associated with all of those contracts. DPAC only maintained comprehensive subcontract data for the first six months (January 1, 2011 to June 30, 2011) and the final 18 months (July 1, 2013 to December 31, 2014) of the study period. For the middle 24 months of the study period, the study team relied on subcontract data that individual Caltrans districts maintain. Based on those data, the study team was able to collect subcontract data for the majority of engineering prime contracts that Caltrans let during that portion of the study period.

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<sup>1</sup> Caltrans considers a contract to be FHWA-funded if there is at least \$1 of FHWA funding included on the contract.

**Caltrans Division of Procurement and Contract non-A&E contracts.** BBC collected data on non-engineering professional services contracts from several different sources. BBC met with DPAC to discuss what data were available for DPAC contracts that did not fall under the oversight of DPAC A&E during the study period. With the assistance of OBEO staff, the study team provided DPAC non-A&E staff with a data request in late July 2015. DPAC responded with a list of non-A&E prime contracts that it let during the study period. The study team augmented those data with DBE and DVBE Reports to determine subcontractor information. Select DPAC non-A&E contracts were then reviewed by OBEO staff to verify the completeness of the data. The study team considered DPAC feedback as appropriate.

**Alternative delivery method projects.** The contract data that BBC analyzed for the disparity study included nine projects that used alternative contract delivery methods. The study team was able to collect data about those projects from three websites:<sup>2</sup>

- Design Build link: <http://www.dot.ca.gov/hq/oppd/designbuild/authorized.htm>;
- CMGC: <http://www.dot.ca.gov/hq/oppd/cmgc/index.htm>; and
- P3: <http://www.dot.ca.gov/p3/>.

Data on those projects included extensive information about prime contractors, project descriptions, award dates, and contract award amounts. In some cases, those data overlapped with information provided by OE and DPAC. The study team received subcontractor data for the alternative delivery projects in several forms. For the Gerald Desmond Bridge project, the study team relied on project payment tracking data. DBE reports and CEM-1201 forms provided the remaining subcontract data for alternative delivery method projects that the study team included in the disparity study.

**Caltrans DLA.** BBC collected DLA contract data from several sources. The study team met with DLA to discuss what types of data were available for the contracts that subrecipient local agencies awarded during the study period. DLA provided BBC with a list of all DLA-associated projects and contracts that subrecipient local agencies awarded during the study period. DLA does not keep any records pertaining to subcontracts associated with those projects. In order to collect that information, the study team worked directly with appropriate subrecipient local agencies.

The study team and Caltrans examined the feasibility of collecting data on more than 2,500 projects that several hundred subrecipient local agencies awarded. Based on that assessment, BBC and Caltrans developed a plan to collect data on a representative sample of DLA-associated projects that was similar to the plan that BBC in the previous Caltrans FHWA disparity study. The study team attempted to collect data for all contracts with a stated contract award amount greater than or equal to \$1 million and for a random sample of contracts with an award amount of less than \$1 million. The resulting sample included 1,205 projects and DLA-associated contracts that BBC included as part of the disparity study.

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<sup>2</sup> Data were collected during early 2016.

The study team worked with Caltrans staff to obtain contact information for all subrecipient local agencies. After receiving that information, BBC mailed data request forms to each agency.<sup>3</sup> For those local agencies that did not respond to the initial data request, the study team sent a follow-up request. The study team worked with Caltrans to send third and final data requests to local agencies that received relatively high dollar value contracts and that did not respond to the first two data requests.

**Caltrans DTP.** The study team collected DTP contract data from several different sources. The study team met with DTP to discuss what types of data were available for the FHWA-funded contracts that DTP awarded during the study period. DTP provided the study team with a list of all local subrecipient agencies that may have awarded FHWA-funded contracts to third-party vendors during the study period. DTP does not keep any records pertaining to subcontracts associated with DTP projects. In order to collect that information, the study team worked directly with local subrecipient agencies.

The study team worked with Caltrans to obtain contact information for all relevant subrecipient local agencies. After receiving that information, BBC mailed data request forms to each agency.<sup>4</sup> For those subrecipient local agencies that did not respond to the initial data request, the study team sent a follow-up request. The study team worked with Caltrans to send third and final data requests to local agencies that were the most likely to have awarded FHWA-funded contracts during the study period and that did not respond to the first two data requests.

**Contracts analyzed.** As shown in Figure 3-1, the study team identified more than 1,800 Caltrans contracts that OE awarded during the study period, more than 2,100 Caltrans contracts that DPAC awarded during the study period, and more than 900 Local Assistance Program contracts that DLA administered during the study period. Those contracts accounted for approximately \$14.5 billion of Caltrans spending. Most of those contracts were suitable for inclusion in the study team’s analyses.

**Figure 3-1.**  
**Number of Caltrans transportation-**  
**related prime contracts by contract**  
**source, 2011-2014**

Source:  
BBC Research & Consulting from Caltrans contract  
data.

Caltrans contracts	Number	Dollars (millions)
<b>Contract sources</b>		
Office Engineer	1,889	\$9,831
Division of Procurement and Contracts	2,127	\$1,414
Division of Local Assistance	955	\$2,229
Division of Transportation Planning	106	\$46
Alternative Delivery	8	\$992
<b>Total</b>	<b>5,085</b>	<b>\$14,512</b>

<sup>3</sup> As part of that process, many local agencies requested Excel/Word files to facilitate the data collection process. The study team provided electronic forms to all agencies that requested them.

<sup>4</sup> As part of that process, many local agencies requested Excel/Word files to facilitate the data collection process. The study team provided electronic forms to all agencies that requested them.

**Contracts included in the study team’s analyses.** The study team included transportation-related construction and professional services contracts that Caltrans awarded between January 1, 2011 and December 31, 2014 in its analyses. For each prime contract and subcontract, the study team determined whether the vendor that performed the work was a for-profit business and identified the industry and *subindustry* that characterized the vendor’s primary line of business (e.g., *water, sewer, and utility lines* is a subindustry of *construction*). The study team identified subindustries based on Caltrans contract data and the reported primary line of work of the contractor. The study team only considered those contracts on which a for-profit business performed the work.

Based on the above criteria, the study team examined 5,085 construction and professional services contracts that Caltrans awarded during the study period, totaling \$14.5 billion. Figure 3-2 presents the number of contracts and associated contract dollars that the study team included in its analyses by funding source. Approximately 72 percent of the associated contract dollars, or \$10.5 billion, were for contracts involving FHWA funds. That amount includes contracts that were only partially funded through FHWA funds.

**Figure 3-2.**  
**Number of Caltrans transportation-related prime contracts by funding source, 2011-2014**

Source:  
BBC Research & Consulting from Caltrans contract data.

Caltrans contracts	Number	Dollars (millions)
<b>Funding sources</b>		
FHWA-funded	2,272	\$10,612
State-funded	2,813	\$3,900
<b>Total</b>	<b>5,085</b>	<b>\$14,512</b>

The study team collected data on 16,582 subcontracts associated with Caltrans contracts awarded during the study period. When considering both prime contracts and subcontracts, the study team examined 21,667 contract elements.

**Contracts not included in the study team’s analyses.** The study team did not include contracts in the utilization analysis that were awarded before or after the study period dates and contracts where the primary industry was not directly related to transportation-related contracting (e.g., financial services).

**Prime contract and subcontract amounts.** For each construction and professional services contract, BBC examined dollars that the prime contractor and any subcontractors received.

- If a contract did not include any subcontracts, the study team attributed the entire award amount (including any amendments or change orders) 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. The study team then calculated prime contractor amount as the total award amount less the sum of dollars committed to all subcontractors. When contract award information was not available, the study team used information on payments to prime contractors and subcontractors.

## C. Collection of Information on Vendors that Participated in Caltrans Contracts

The study team collected information on vendors that participated in Caltrans contracts during the study period from a variety of sources including:

- Caltrans contract data;
- The California Unified Certification Program (CUCP);
- Dun & Bradstreet (D&B) business listings and other business information sources;
- Business websites;
- Telephone surveys with business owners and managers; and
- Caltrans staff review.

The study team compiled the following information about each vendor:

- Business location;
- Ownership status (i.e., whether the business is minority- or woman-owned);
- Primary line of work;
- Year of establishment; and
- Business size (in terms of number of employees and revenue).

## D. Types of Work Involved in Caltrans Contracts

The study team determined the subindustries, or work types, that were involved in each prime contract and subcontract based on Caltrans contract data and on information about each associated prime contractor and subcontractor's primary line of business. The study team developed the subindustries based in part on D&B 8-digit classification codes. Figure 3-3 presents the dollars that the study team examined in each relevant subindustry as part of its analyses.

When types of work accounted for a relatively small portion of total dollars that the study team examined, they were combined into aggregated subindustries. For example, the contracting dollars that Caltrans awarded to contractors for *sheet metal work* totaled less than 1 percent of the total contract dollars that the study team examined in the study. As a result, BBC combined sheet metal work with other types of work that accounted for relatively small portions of total dollars in "other construction."

## E. Locations of Businesses that Perform Caltrans 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 Caltrans contracting data to help determine the relevant geographic market area for the study.

**Figure 3-3.**  
**Prime contracts and**  
**subcontract dollars by**  
**subindustry, 2011-2014**

Source:  
 BBC Research & Consulting from Caltrans  
 contract data.

Industry	Total (in thousands)
<b>Construction</b>	
Highway and street construction	\$8,063,757
Asphalt and concrete supply	\$427,723
Electrical work	\$425,550
Rebar and reinforcing steel	\$409,923
Landscape services	\$264,624
Land site prep	\$260,415
Fencing, guardrails and signs	\$238,375
Painting and striping	\$169,068
Water, sewer, and utility lines	\$157,049
Wrecking and demolition	\$149,565
Trucking	\$145,461
Excavation and drilling	\$129,743
Heavy construction equipment rental	\$76,137
Flagging services	\$51,782
Construction sand and gravel	\$29,697
Electrical supplies	\$11,613
Towing services	\$739
Other construction supplies	\$216,510
Other construction	\$198,898
<b>Total Construction</b>	<b>\$11,426,630</b>
<b>Professional Services</b>	
Engineering	\$2,132,690
Construction management	\$360,814
Environmental research and consulting	\$339,125
Testing services	\$83,488
Transportation consulting	\$48,512
Surveying and mapping	\$19,973
Landscape architecture	\$5,690
Archeological services	\$56
Other professional services	\$2,659
<b>Total Professional Services</b>	<b>\$2,993,007</b>
<b>Total Contracting</b>	<b>\$14,419,637</b>

- The study team summed the dollars going to each prime contractor and subcontractor involved in Caltrans contracts during the study period.
- For each prime contractor and subcontractor, BBC determined whether the company had a business establishment in California based on Caltrans vendor data and additional research.
- BBC then added the dollars for businesses with California locations and compared the total with that for businesses with no establishments within the state.

Based on that analysis, more than 98 percent of Caltrans transportation-related contracting dollars during the study period went to businesses with known locations in California. That information indicated that California should be considered the relevant geographic market area

for the study. BBC's analyses, including the availability analysis and quantitative analyses of marketplace conditions, focused on California.

## **F. Assumptions in the Collection and Analysis of Caltrans Contract Data**

Two assumptions are implicit in the collection and analysis of Caltrans contract data:

- The sample of contracts drawn for the analysis of is representative of the universe of Local Assistance contracts that subrecipient local agencies let during the study period; and
- The subcontract data entered on forms CEM-1201, CEM-2402, and ADM-3027 are accurate and complete.

There is no indication that the stratified random sample of Local Assistance contracts that the study team used was not representative of all Local Assistance contracts. The study team made multiple attempts to collect information from local agencies in order to minimize any possibility of sample bias.

In very few cases, the study team did find potential data entry errors on form CEM-1201 (Subcontracting Request). Those errors were apparent because the total value of the subcontracts exceeded the value of the contract award (with change orders) in its entirety. For those cases, the study team attempted to determine the correct information through discussions with Caltrans and from other sources, where available. Further, Caltrans reviewed the study team's compilation of prime contracts and subcontracts as a final quality control measure.

# CHAPTER 4.

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## Availability Analysis



# CHAPTER 4.

## Availability Analysis

BBC Research & Consulting (BBC) analyzed the availability of minority- and woman-owned businesses that are ready, willing, and able to perform on California Department of Transportation (Caltrans) construction and professional services prime contracts and subcontracts. Chapter 4 describes the availability analysis in seven parts:

- A. Purpose of the availability analysis;
- B. Potentially available businesses;
- C. Businesses in the availability database;
- D. Availability calculations;
- E. Availability results;
- F. Base figure for overall DBE goal; and
- G. Implications for DBE contract goals.

Appendix E provides supporting information related to the availability analysis.

### A. Purpose of the Availability Analysis

BBC examined the availability of minority- and woman-owned businesses for Caltrans prime contracts and subcontracts to inform the department's implementation of the Federal Disadvantaged Business Enterprise (DBE) Program. In addition, BBC used availability analysis results as inputs in the disparity analysis to compare the percentage of Caltrans contract dollars that went to minority- and woman-owned businesses during the study period (i.e., utilization) to the percentage of dollars that one might expect those businesses to receive based on their availability for specific types and sizes of Caltrans prime contracts and subcontracts (i.e., availability). Comparisons between participation and availability allowed the study team to determine whether any minority- or woman-owned business groups were underutilized during the study period relative to their availability for Caltrans work (for details, see Chapter 6).

### B. 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 professional services prime contracts and subcontracts that Caltrans and subrecipient local agencies awarded during the study period. BBC began the availability analysis by identifying the specific subindustries in which Caltrans spends the majority of its contracting dollars (for details, see Chapter 3) as well as the geographic areas in which the majority of the businesses with which Caltrans spends those contracting dollars are located (i.e., the *relevant geographic market area*, which BBC identified as the entire state of California). The study team then developed a database of potentially available businesses through surveys with businesses located in the relevant geographic market area that do work within relevant subindustries. That method of examining availability is referred to as a

*custom census* and has been accepted in federal court as a valid methodology for conducting availability analyses. Figure 4-1 summarizes the strengths of BBC's custom census approach.

**Overview of availability surveys.** The study team conducted telephone surveys with business owners and managers to identify California businesses that are potentially available for Caltrans construction and professional services prime contracts and subcontracts.<sup>1</sup> BBC began the survey process by collecting information about business establishments from Dun & Bradstreet (D&B) Marketplace.<sup>2</sup> 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 contracts that Caltrans and subrecipient local agencies awarded during the study period. BBC obtained listings on 30,973 California businesses that do work related to those work specializations. However, 4,584 of those business listings did not include a working phone number. BBC attempted availability surveys with the remaining 26,349 business establishments.

**Figure 4-1.**  
**Summary of BBC's custom**  
**census availability approach**

Federal courts have reviewed and upheld custom census approaches to conducting availability analyses. Compared with other court-reviewed approaches, BBC's approach adds several layers of screening to determine which businesses are potentially available for work in relevant industries and subindustries. For example, BBC collects detailed information from businesses about their roles as contractors, their interest in local government work, and the geographic locations of their work—items not included in some previous court-reviewed availability analyses. BBC also analyzes the sizes of contracts and subcontracts on which businesses have bid on or performed in the past to determine the *relative capacity* of businesses.

**Availability survey information.** The BBC project team conducted telephone surveys with the owners or managers of the identified business establishments. Survey questions covered many topics about each business including:

- Status as a private business (as opposed to a public agency or nonprofit organization);
- Status as a subsidiary or branch of another company;
- Primary lines of work;
- Qualifications and interest in performing work for Caltrans or other local government agencies;
- Qualifications and interest in performing work as a prime contractor or as a subcontractor;
- Largest prime contract or subcontract bid on or performed in the previous five years;
- Year of establishment; and
- Race/ethnicity and gender of ownership.

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<sup>1</sup> The study team offered business representatives the option of completing surveys via fax or e-mail if they preferred not to complete surveys via telephone.

<sup>2</sup> D&B Marketplace is accepted as the most comprehensive and complete source of business listings in the nation.

Appendix E provides details about specific survey questions and an example of the availability survey instrument.

**Potentially available businesses.** BBC considered businesses to be potentially available for Caltrans prime contracts or subcontracts if they reported having a location in California and reported possessing *all* of the following characteristics:

- Being a private business (as opposed to a nonprofit organization);
- Having performed work relevant to Caltrans construction and professional services contracting;
- Having bid on or performed construction and professional services prime contracts or subcontracts in either the public or private sector in California in the past five years;
- Being able to perform work or serve customers in the geographical area in which the work took place; and
- Being qualified for and interested in work for Caltrans or other state or local government agencies.<sup>3</sup>

BBC also considered the following information about businesses to determine if they were potentially available for specific prime contracts and subcontracts that Caltrans and subrecipient local agencies awarded during the study period:

- The largest contract they bid on or performed in the past five years; and
- The year in which they were established.

### C. Businesses in the Availability Database

After conducting availability surveys with thousands of local businesses, the study team developed a database of information about businesses that are potentially available for Caltrans construction and professional services contracting work. Information from the database allowed BBC to develop a representative depiction of businesses that are ready, willing, and able to perform work for Caltrans. Figure 4-2 presents the percentage of businesses in the study team's *availability database* that were minority- or woman-owned. The information in Figure 4-2 reflects a simple *head count* of businesses with no analysis of their availability for specific Caltrans prime contracts and subcontracts. Thus, it represents only a first step toward analyzing the availability of minority- and woman-owned businesses for Caltrans work. The study team's analysis included 1,852 businesses that are potentially available for specific construction and professional services contracts that Caltrans and subrecipient local agencies awarded during the study period. As shown in Figure 4-2, of those businesses, 36.3 percent were minority- or woman-owned.

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<sup>3</sup> That information was gathered separately for prime contract and subcontract work.

## D. Availability Calculations

BBC analyzed information from the availability database to develop dollar-weighted estimates of the availability of minority- and woman-owned businesses for Caltrans contracting work. Those estimates represent the percentage of Caltrans construction and professional services contracting dollars that minority- and woman-owned businesses would be expected to receive based on their availability for specific types and sizes of Caltrans prime contracts and subcontracts.

**Figure 4-2.**  
**Percentage of businesses in the**  
**availability database that were**  
**minority- or woman-owned**

Note:

Numbers rounded to nearest tenth of 1 percent  
and thus may not sum exactly to totals.

Source:

BBC Research & Consulting availability analysis.

Race/Ethnicity and Gender	Number of Firms	Percent of Firms
Black American owned	50	2.7 %
Asian Pacific American owned	49	2.6
Subcontinent Asian American owned	32	1.7
Hispanic American owned	249	13.4
Native American owned	29	1.6
<b>Total minority owned</b>	<b>409</b>	<b>22.1 %</b>
White woman owned	264	14.3 %
<b>Total minority/woman owned</b>	<b>673</b>	<b>36.3 %</b>
<b>Total majority-owned firms</b>	<b>1,179</b>	<b>63.7 %</b>
<b>Total firms</b>	<b>1,852</b>	<b>100.0 %</b>

**Steps to calculating availability.** BBC used a bottom up, contract-by-contract matching approach to calculate availability. Only a portion of the businesses in the availability database was considered potentially available for any given Caltrans prime contract or subcontract. BBC first examined the characteristics of each specific prime contract or subcontract (referred to generally as a *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 role (i.e., as a prime contractor or subcontractor), in that location, of that size, and that were in business in the year that Caltrans awarded the contract element.

BBC identified the specific characteristics of each prime contract and subcontract 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 construction and professional services work in that particular role for that specific type of work for Caltrans;
  - Are able to serve customers in the geographical area in which the work took place;
  - Have bid on or performed work of that size in the past five years; and
  - Were in business in the year that Caltrans awarded the contract element.

2. The study team then counted the number of minority-owned businesses (separately by race/ethnicity), non-Hispanic white woman-owned businesses, and businesses owned by non-Hispanic white men 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 dollar-weighted estimates of the availability of minority- and woman-owned businesses, both overall and separately for each racial/ethnic and gender group. Figure 4-3 provides an example of how BBC calculated availability for a specific subcontract associated with a construction prime contract that Caltrans and subrecipient local agencies awarded during the study period.

**Improvements on a simple head count of businesses.** BBC used a custom census approach to calculating the availability of minority- and woman-owned businesses for Caltrans work rather than using a simple head count of minority- and woman-owned businesses (e.g., simply calculating the percentage of all local construction and professional services businesses that are minority or woman owned). 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.** Federal regulations suggest calculating availability based on businesses' abilities to perform specific types of work. For example, the United States Department of Transportation (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 [minority- or woman-owned] and the percentage of trucking businesses that are [minority- or woman-owned], and weight the first figure by 90 percent*

**Figure 4-3.  
Example of the availability calculation  
for a Caltrans subcontract**

On a contract that Caltrans awarded in 2011, the prime contractor awarded a subcontract worth \$271,754 for highway and street construction work. To determine the overall availability of minority- and woman-owned businesses for that subcontract, the study team identified businesses in the availability database that:

- a. Were in business in 2011;
- b. Indicated that they performed highway and street construction work;
- c. Reported bidding on work of similar or greater size in the past;
- d. Reported being able to work or serve customers in the related California district; and
- e. Reported qualifications and interest in working as a subcontractor on Caltrans or other local agency projects.

The study team found 97 businesses in the availability database that met those criteria. Of those businesses, 39 were minority- or woman-owned businesses. Thus, the availability of minority- and woman-owned businesses for the subcontract was 40 percent (i.e.,  $39/97 = 40\%$ ).

and the second figure by 10 percent when calculating overall [minority- and woman-owned business] availability.<sup>4</sup>

The BBC study team took type of work into account by examining 28 different subindustries related to transportation-related construction and professional services as part of estimating availability for Caltrans prime contracts and subcontracts.

**BBC's approach accounts for qualifications and interest in relevant 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 Caltrans construction and professional services work (in addition to considering several other factors related to Caltrans prime contracts and subcontracts such as contract types, sizes, and locations):

- Businesses that reported being qualified for and interested in working as prime contractors were counted as available for prime contracts;
- 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 relative capacity of businesses.** 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. BBC considered whether businesses had previously bid on or received at least one contract of an equivalent or greater dollar value. 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., *Associated General Contractors of America, San Diego Chapter vs. California Department of Transportation, et al.*,<sup>5</sup> *Western States Paving Company v. Washington State DOT*,<sup>6</sup> *Rothe Development Corp. v. U.S. Department of Defense*,<sup>7</sup> and *Engineering Contractors Association of S. Fla. Inc. vs. Metro Dade County*<sup>8</sup>).

As part of the disparity study, BBC used regression analysis to examine whether the relative capacity of minority- and woman-owned businesses differs from that of business owned by non-Hispanic white men after accounting for various other factors. This analysis indicated that the capacity of minority- and woman-owned businesses was not depressed relative to that of

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<sup>4</sup> Tips for Goals Setting in the Disadvantaged Business Enterprise (DBE) Program, <http://www.osdbu.dot.gov/dbeprogram/tips.cfm>.

<sup>5</sup> *AGC, San Diego Chapter v. California DOT*, 2013 WL 1607239 (9th Cir. April 16, 2013).

<sup>6</sup> *Western States Paving Co. v. Washington State DOT*, 407 F.3d 983 (9th Cir. 2005), cert. denied, 546 U.S. 1170 (2006).

<sup>7</sup> *Rothe Development Corp. v. U.S. Department of Defense*, 545 F.3d 1023 (Fed. Cir. 2008).

<sup>8</sup> *Engineering Contractors Association of S. Fla. Inc. vs. Metro Dade County*, 943 F. Supp. 1546 (S.D. Fla. 1996).

businesses owned by non-Hispanic white men after accounting for differences in industry and age of businesses.

**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 relevant case law and federal regulations including USDOT’s “Tips for Goal-Setting in the Disadvantaged Business Enterprise (DBE) Program,” which suggests a dollar-weighted approach to calculating availability.

## E. Availability Results

BBC estimated the availability of minority- and woman-owned businesses for the 21,667 transportation-related construction and professional services prime contracts and subcontracts that Caltrans and subrecipient local agencies awarded between January 1, 2011 and December 31, 2014. Figure 4-4 presents overall dollar-weighted availability estimates by racial/ethnic and gender group for those contracts.

**Figure 4-4.**  
**Overall dollar-weighted availability estimates by racial/ethnic and gender group**

**Note:**

Numbers rounded to nearest tenth of 1 percent and thus may not sum exactly to totals.

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

**Source:**

BBC Research & Consulting availability analysis.

Race/Ethnicity and Gender	Utilization Benchmark (Availability %)
Black American owned	1.6 %
Asian Pacific American owned	1.5
Subcontinent Asian American owned	0.5
Hispanic American owned	10.2
Native American owned	0.8
<b>Total minority owned</b>	<b>14.6 %</b>
White woman owned	4.9 %
<b>Total minority/woman owned</b>	<b>19.5 %</b>

Overall, the availability of minority- and woman-owned businesses for Caltrans construction and professional services contracts is 19.5 percent. Hispanic American-owned businesses (10.2%) and non-Hispanic white woman-owned businesses (4.9%) exhibited the highest availability percentages among all groups. Note that availability estimates varied when the study team examined different subsets of those contracts (for availability results for specific contract sets, see Appendix F). Assuming that the mix of the types, sizes, and locations of the contracts that Caltrans awards in the future are similar to that of the contracts that the department awarded during the study period, one might expect 19.5 percent of Caltrans’s contracting dollars to go to minority- and woman-owned businesses based on their availability for that work.

## F. Base Figure for Overall DBE Goal

Establishing a base figure is the first step in calculating an overall goal for DBE participation in Caltrans's Federal Highway Administration (FHWA)-funded transportation contracts.<sup>9</sup> BBC calculated the base figure using the same availability database and approach described above except that calculations only included *potential DBEs*—minority- and woman-owned businesses that are DBE-certified or appear that they could be DBE-certified based on revenue requirements described in 49 Code of Federal Regulations Part 26—and only included FHWA-funded prime contracts and subcontracts. BBC's approach to calculating Caltrans's base figure is consistent with:

- Court-reviewed methodologies in several states including California, Illinois, Minnesota, and Washington;
- Instructions in The Final Rule effective September 25, 2014 that outline revisions to the Federal DBE Program; and
- USDOT's "Tips for Goal-Setting in the Disadvantaged Business Enterprise (DBE) Program."

BBC's availability analysis indicates that the availability of potential DBEs for Caltrans's FHWA-funded transportation contracts is 17.6 percent. Caltrans might consider 17.6 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 department awards in the time period that the goal will cover are similar to the types of FHWA-funded contracts that the department awarded during the study period. For details about Caltrans's base figure for its overall DBE goal, see Chapter 8.

**Differences from overall MBE/WBE availability.** The availability of potential DBEs for FHWA-funded contracts is slightly less than the overall availability of minority- and woman-owned businesses that is presented in Figure 4-4. BBC's calculation of the overall availability of minority- and woman-owned businesses includes three groups of minority- and woman-owned businesses that the study team did not count as potential DBEs when calculating the base figure:

- Minority- and woman-owned businesses that graduated from the DBE Program (that were not recertified);
- Minority- and woman-owned businesses that are not currently DBE-certified but that applied for DBE certification and have been denied; and
- Minority- and woman-owned businesses that are not currently DBE-certified that reported annual revenues over the most recent three years that were 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 the overall

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<sup>9</sup> The study team considered a contract to be FHWA-funded if it included at least one dollar of FHWA funding.



availability of minority- and woman-owned businesses included both FHWA- and state-funded transportation prime contracts and subcontracts.

**Additional steps before Caltrans determines its overall DBE goal.** Caltrans 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 Caltrans to make a step-2 adjustment as long as the department can explain what factors it considered and why no adjustment was warranted. Chapter 8 discusses factors that Caltrans might consider in deciding whether to make a step-2 adjustment to the base figure.

## **G. Implications for DBE Contract Goals**

If Caltrans determines that the use of DBE contract goals is appropriate 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 minority- and woman-owned businesses to participate in particular contracts. The Federal DBE Program provides agencies that use DBE contract goals with some flexibility in how they set those goals. DBE goals on some contracts might be higher or 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 5.

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## Utilization Analysis

# CHAPTER 5.

## Utilization Analysis

Chapter 5 presents information about the participation of minority- and woman-owned businesses in transportation-related construction and professional services contracts that the Caltrans and subrecipient local agencies awarded between January 1, 2011 and December 31, 2014. (Chapter 3 provides additional information about data collection and methodology related to the utilization analysis.) Chapter 5 is organized in two parts:

- A. Overview of utilization analysis; and
- B. Utilization analysis results.

### A. Overview of Utilization Analysis

BBC measured the participation of minority- and woman-owned businesses in Caltrans contracting in terms of *utilization*—the percentage of prime contract and subcontract dollars that Caltrans and subrecipient local agencies awarded to minority- and woman-owned businesses during the study period. For example, if 5 percent of Caltrans prime contract and subcontract dollars went to non-Hispanic white woman-owned businesses on a particular set of contracts, utilization of non-Hispanic white woman-owned businesses for that set of contracts would be 5 percent. The study team measured the participation of all minority- and woman-owned businesses regardless of certification and separately of minority- and woman-owned businesses that were certified as Disadvantaged Business Enterprises (DBEs).

The United States Department of Transportation (USDOT) requires Caltrans to submit reports about the participation of DBEs in its Federal Highway Administration (FHWA)-funded transportation contracts twice each year (typically in June and December). BBC's analysis of the participation of minority- and woman-owned businesses in Caltrans contracting goes beyond what the department currently reports to USDOT. Two key differences are that:

- BBC counts all minority- and woman-owned businesses in its analysis, not only certified DBEs; and
- BBC examines FHWA- and state-funded contracts, not only FHWA-funded contracts.

**All minority- and woman-owned businesses, not only certified DBEs.** Per USDOT regulations, Caltrans prepares DBE utilization reports for FHWA based only on information about certified DBEs. Caltrans does not track the participation of minority- and woman-owned businesses that are not DBE-certified for those reports. In contrast, BBC's utilization analysis includes the participation of *all* minority- and woman-owned businesses, regardless of whether they are certified as DBEs. The study team included minority- and woman-owned businesses that:

- Are currently DBE-certified;
- May have once been DBE-certified and graduated (or let their certifications lapse); and
- Are not eligible for certification or have never been certified.

BBC provides utilization results for all minority- and woman-owned businesses and separately for minority- and woman-owned businesses that were DBE-certified during the study period.

**FHWA- and state-funded contracts.** USDOT requires Caltrans to prepare DBE participation reports only for its FHWA-funded contracts. Thus, Caltrans reports the participation of certified DBEs only for those contracts. BBC analyzed the participation of minority- and woman-owned businesses in both FHWA- and state-funded Caltrans contracts.

## B. Utilization Analysis Results

Figure 5-1 presents the overall percentage of contracting dollars that went to minority- and woman-owned businesses on transportation-related construction and professional services contracts that Caltrans and subrecipient local agencies awarded during the study period (including both prime contracts and subcontracts). The darker portion of the bar represents the percentage of contracting dollars that certified DBEs received during the study period. As shown in Figure 5-1, overall, minority- and woman-owned businesses received 14.4 percent of the relevant contracting dollars that Caltrans and subrecipient local agencies awarded during the study period. The darker portion of the bar shows that 6.6 percent of relevant contracting dollars went to certified DBEs.

**Figure 5-1.**  
**Participation of minority- and woman-owned businesses**

**Notes:**

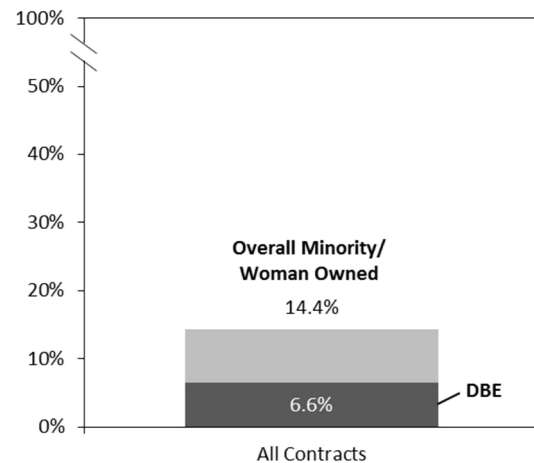
The study team analyzed 21,667 prime contracts and subcontracts.

The darker portion of the bar represents participation of certified DBEs.

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

**Source:**

BBC Research & Consulting utilization analysis.



In addition, BBC examined participation in Caltrans contracting separately for each relevant racial/ethnic and gender group. Those results are presented in Figure 5-2. Overall, Hispanic American-owned businesses and non-Hispanic white woman-owned businesses exhibited higher levels of participation on Caltrans contracts than all other groups (7.1% for Hispanic American-owned businesses and 4% for non-Hispanic white woman-owned businesses).

**Figure 5-2.**  
**Participation of minority- and woman-owned businesses by group**

Note:

The study team analyzed 21,667 prime contracts and subcontracts.

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

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

Source:

BBC Research & Consulting utilization analysis.

	Total	
	\$ in Thousands	Percent
<b>Minority/Woman owned</b>		
Black American owned	\$95,645	0.6 %
Asian Pacific American owned	\$243,341	1.6
Subcontinent Asian American owned	\$82,941	0.5
Hispanic American owned	\$1,099,557	7.1
Native American owned	\$98,684	0.6
White woman owned	\$613,563	4.0
<b>Total minority/woman owned</b>	<b>\$2,233,731</b>	<b>14.4 %</b>
Majority owned	\$13,283,711	85.6
<b>Total</b>	<b>\$15,517,442</b>	<b>100 %</b>
<b>DBEs</b>		
Black American owned	\$57,925	0.4 %
Asian Pacific American owned	\$188,258	1.2
Subcontinent Asian American owned	\$50,276	0.3
Hispanic American owned	\$469,324	3.0
Native American owned	\$66,510	0.4
White male owned	\$2,630	0.0
White woman owned	\$189,146	1.2
<b>Total DBE</b>	<b>\$1,024,068</b>	<b>6.6 %</b>
Non-DBE	\$14,493,374	93.4
<b>Total</b>	<b>\$15,517,442</b>	<b>100 %</b>

Further analysis revealed that, in many cases, a relatively small number of businesses accounted for relatively large percentages of minority- and woman-owned business participation in Caltrans contracting during the study period:

- A Black American-owned asphalt supplier received 28 percent of the total dollars that went to Black American-owned businesses (approximately \$27 million of \$95.6 million);
- A Hispanic American-owned paving contractor received 18 percent of the total dollars that went to Hispanic American-owned businesses (approximately \$195 million of \$1.1 billion);
- A Native American-owned flagging contractor received 19 percent of the total dollars that went to Native American-owned businesses (approximately \$18.6 million of the \$98.7 million);
- An Asian Pacific American-owned wrecking and demolition contractor received 10 percent of the total dollars that went to Asian Pacific American-owned businesses (approximately \$24.3 million of \$243 million);
- A Subcontinent Asian American-owned highway and street contractor received 20 percent of the total dollars that went to Subcontinent Asian American-owned businesses (approximately \$16.8 million of \$82.9 million); and
- A non-Hispanic white woman-owned highway construction business received 18 percent of the total dollars that went to non-Hispanic white woman-owned businesses (approximately \$113.1 million of \$613.6 million).

# CHAPTER 6.

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## Disparity Analysis

# CHAPTER 6.

## Disparity Analysis

The disparity analysis compared the participation of minority- and woman-owned businesses on transportation-related contracts that the California Department of Transportation (Caltrans) and subrecipient local agencies awarded between January 1, 2011 and December 31, 2014 (i.e., the study period) to what those businesses might be expected to receive based on their availability for that work. The analysis focused on construction and professional services contracts. Chapter 6 presents the disparity analysis in five parts:

- A. Overview of disparity analysis;
- B. Overall disparity analysis results;
- C. Disparity analysis results for Federal Highway Administration (FHWA)-funded contracts;
- D. Disparity analysis results for state-funded contracts; and
- E. Statistical significance of disparity analysis results.

### A. Overview of Disparity Analysis

As part of the disparity analysis, BBC Research & Consulting (BBC) compared the actual participation of minority- and woman-owned businesses in Caltrans prime contracts and subcontracts with the percentage of contract dollars that minority- and woman-owned businesses might be expected to receive based on their availability for that work. BBC made those comparisons for each relevant racial/ethnic and gender group. BBC reports disparity analysis results for all Caltrans contracts considered together and separately for different sets of contracts (e.g., prime contracts and subcontracts).

BBC expressed both actual participation and availability as percentages of the total dollars associated with a particular set of contracts, making them directly comparable (e.g., 5% participation compared with 4% availability). BBC then calculated a *disparity index* to help compare participation and availability results across relevant racial/ethnic and gender groups and across different sets of contracts. A disparity index of 100 indicates a match between actual participation and availability (referred to as *parity*). A disparity index of less than 100 indicates a disparity between participation and availability, and a disparity index of less than 80 is often considered *substantial*.<sup>1</sup> Figure 6-1 describes how BBC calculates disparity indices.

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<sup>1</sup> Many courts have deemed disparity indices below 80 as being “substantial” and have accepted them as evidence of adverse conditions for minority- and woman-owned businesses (e.g., 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); and *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.

The disparity analysis results that BBC presents in Chapter 6 summarize detailed results tables provided in Appendix F. Each table in Appendix F presents disparity analysis results for a different set of Caltrans contracts. For example, Figure 6-2, which is identical to Figure F-2 in Appendix F, presents disparity analysis results for *all* Caltrans contracts that the study team examined as part of the study—that is, transportation-related construction and professional services prime contracts and subcontracts that Caltrans and subrecipient local agencies awarded during the study period. Appendix F includes analogous tables for different subsets of contracts including those that present results separately for:

- Construction and professional services contracts;
- Prime contracts and subcontracts;
- FHWA- and state-funded contracts; and
- Large and small prime contracts.

The heading of each table in Appendix F provides a description of the subset of contracts that the study team analyzed for that particular disparity analysis table.

A review of Figure 6-2 helps to introduce the calculations and format of all of the disparity analysis tables in Appendix F. As illustrated in Figure 6-2, the disparity analysis tables present information about each relevant racial/ethnic and gender group (as well as about all businesses) in separate rows:

- “All firms” in row (1) pertains to information about all businesses owned by non-Hispanic white men (i.e., majority-owned businesses) and all minority- and woman-owned businesses considered together.
- Row (2) provides results for all minority- and woman-owned businesses, regardless of whether they were certified as Disadvantaged Business Enterprises (DBEs).
- Row (3) provides results for all non-Hispanic-owned businesses, regardless of whether they were certified as DBEs.
- Row (4) provides results for all minority-owned businesses, regardless of whether they were certified as DBEs.
- Rows (5) through (10) provide results for businesses of each individual minority group, regardless of whether they were certified as DBEs.

#### **Figure 6-1. Calculation of disparity indices**

The disparity index provides a way of assessing how closely the actual participation of minority- and woman-owned businesses matches the percentage of contract dollars that those businesses might be expected to receive based on their availability for specific sets of contracts. One can directly compare a disparity index for one racial/ethnic or gender group to that of another group and compare disparity indices across different sets of contracts. BBC calculates disparity indices using the following formula:

$$\frac{\% \text{ actual participation}}{\% \text{ availability}} \times 100$$

For example, if actual participation of non-Hispanic white woman-owned businesses on a set of contracts was 2 percent and the availability of non-Hispanic white woman-owned businesses 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, non-Hispanic white woman-owned businesses would have actually received 20 cents of every dollar that they might be expected to receive based on their availability.



**Figure 6-2.**  
**Example of a disparity analysis table from Appendix F (same as Figure F-2 in Appendix F)**

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All firms	21,667	\$14,419,637	\$15,517,442				
(2) MBE/WBE	7,871	\$2,037,546	\$2,233,731	14.4	19.5	-5.1	73.8
(3) WBE	2,766	\$547,491	\$613,563	4.0	4.9	-1.0	80.0
(4) MBE	5,105	\$1,490,056	\$1,620,168	10.4	14.6	-4.1	71.7
(5) Black American owned	585	\$86,261	\$95,645	0.6	1.6	-0.9	39.4
(6) Asian Pacific American owned	888	\$213,879	\$243,341	1.6	1.5	0.1	105.5
(7) Subcontinent Asian American owned	287	\$77,239	\$82,941	0.5	0.5	0.1	110.6
(8) Hispanic American owned	2,492	\$1,008,655	\$1,099,557	7.1	10.2	-3.1	69.4
(9) Native American owned	769	\$87,013	\$98,684	0.6	0.8	-0.2	77.6
(10) Unknown MBE	84	\$17,008					
(11) DBE-certified	4,925	\$924,989	\$1,024,068	6.6			
(12) Woman-owned DBE	1,446	\$164,460	\$189,146	1.2			
(13) Minority-owned DBE	3,473	\$757,899	\$832,292	5.4			
(14) Black American-owned DBE	454	\$51,943	\$57,925	0.4			
(15) Asian Pacific American-owned DBE	649	\$167,567	\$188,258	1.2			
(16) Subcontinent Asian American-owned DBE	238	\$47,491	\$50,276	0.3			
(17) Hispanic American-owned DBE	1,538	\$430,159	\$469,324	3.0			
(18) Native American-owned DBE	582	\$60,183	\$66,510	0.4			
(19) Unknown DBE-MBE	12	\$555					
(20) White male-owned DBE	6	\$2,630	\$2,630	0.0			

Note: Numbers are rounded to the nearest thousand dollars or tenth of one percent. "White woman-owned" refers to non-Hispanic white woman-owned businesses.

\* Unknown minority-owned businesses and unknown DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 5) accounted for 25 percent of total minority-owned business 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.

Source: BBC Research & Consulting disparity analysis.

The bottom half of Figure 6-2 presents utilization results for businesses that were certified as DBEs. BBC does not report availability or disparity analysis results separately for DBE-certified businesses.

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

- Column (a) presents the total number of prime contracts and subcontracts (i.e., contract elements) that the study team analyzed as part of the contract set. As shown in row (1) of column (a) of Figure 6-2, the study team analyzed 21,667 contract elements. The value presented in column (a) for each individual racial/ethnic and gender group represents the number of contract elements in which businesses of that particular group participated (e.g., as shown in row (5) of column (a), Black American-owned businesses participated in 585 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 6-2, the study team examined approximately \$14.4 billion for the entire set of contract elements. The dollar totals include both prime contract and subcontract dollars. The value presented in column (b) for each individual racial/ethnic and gender group represents the dollars that the businesses of that particular group received on the set of contract elements (e.g., as shown in row (5) of column (b), Black American-owned businesses received approximately \$86.3 million).
- Column (c) presents the dollars (in thousands) that were associated with the set of contract elements after adjusting those dollars for two factors:
  - *Local Assistance contracts.* BBC collected data on a sample of contracts that subrecipient agencies awarded through the Local Assistance Program. The study team weighted the data to be representative of the entire set of those contracts. Chapter 3 describes the sampling and weighting procedures that BBC used.
  - *Unidentified race/ethnicity.* BBC pro-rated the dollars that went to businesses that the study team identified as minority-owned or as DBEs but for which specific race/ethnicity information was not available. The dollar totals include both prime contract and subcontract dollars.
- Column (d) presents the utilization percentage of each racial/ethnic and gender 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 Black American-owned businesses, the study team divided \$95.6 million by \$15.5 billion and multiplied by 100 for a result of 0.6 percent, as shown in row (5) of column (d)).

**Availability results.** Column (e) of Figure 7-2 presents the availability of each relevant racial/ethnic and gender group for all contract elements that the study team analyzed as part of the contract set. Availability estimates, which are represented as a percentage of the total contracting dollars associated with the set of contracts, serve as benchmarks against which to compare utilization results for specific groups for specific sets of contracts (e.g., as shown in row (5) of column (e), the availability of Black American-owned businesses is 1.6%).

**Differences between utilization and availability.** The next step in analyzing whether there were disparities between the participation and availability of minority- and woman-owned businesses is to subtract the utilization percentage from the availability percentage. Column (f) of Figure 7-2 presents the percentage point difference between utilization and availability for each relevant racial/ethnic and gender group. For example, as presented in row (5) of column (f) of Figure 7-2, the participation of Black American-owned businesses in Caltrans contracts was 0.9 percentage points less than their availability.

**Disparity indices.** It is sometimes difficult to interpret absolute percentage differences between participation and availability. Therefore, BBC also calculated a disparity index for each relevant racial/ethnic and gender group, which measured actual participation relative to availability and served as a metric to compare any disparities across different groups and different sets of contracts. BBC calculated disparity indices by dividing the utilization percentage for each group by the availability percentage for each group and multiplying by 100. Smaller disparity indices indicate greater disparities (i.e., a greater degree of underutilization).

Column (g) of Figure 7-2 presents the disparity index for each relevant racial/ethnic and gender group. For example, as reported in row (5) of column (g), the disparity index for Black American-owned businesses was approximately 39, indicating that Black American-owned businesses actually received approximately \$0.39 for every dollar that they might be expected to receive based on their availability for prime contracts and subcontracts that Caltrans and subrecipient local agencies awarded during the study period.

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 participation was more than twice as much as availability for a particular group for a particular set of contracts.
- When there was no participation and no availability for a particular group for a particular set of contracts, BBC reported a disparity index of "100," indicating parity.
- When participation 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+."<sup>2</sup>

## B. Overall Disparity Analysis Results

BBC used the disparity analysis results from Figure 6-2 to assess any disparities between the participation of minority- and woman-owned businesses in prime contracts and subcontracts that Caltrans and subrecipient local agencies awarded during the study period as well as their availability for that work. Figure 6-3 presents disparity indices for all relevant racial/ethnic and gender groups considered together and separately for each group. The line down the center of

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<sup>2</sup> A particular racial/ethnic or gender 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 businesses that participated in Caltrans contracts during the study period were out of business at the time that BBC conducted availability surveys.

the graph shows a disparity index level of 100, which indicates parity between participation and availability. Disparity indices less than 100 indicate disparities between participation and availability (i.e., underutilization). For reference, a line is also drawn at a disparity index level of 80, because some courts use 80 as a threshold for what indicates a substantial disparity.

**Figure 6-3.**  
**Disparity indices by group**

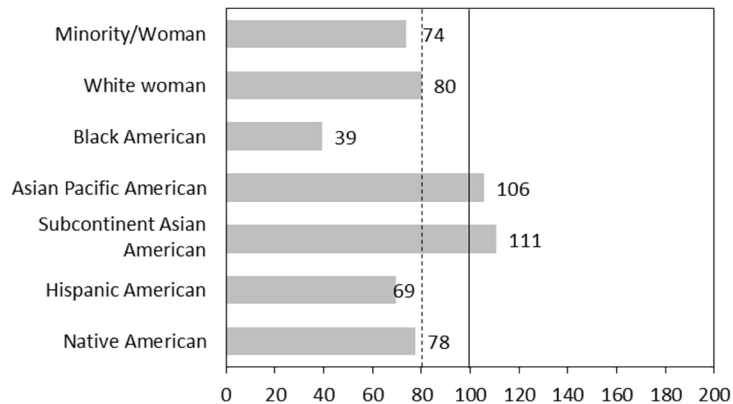
Note:

The study team analyzed 21,667 prime contracts/subcontracts.

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

Source:

BBC Research & Consulting disparity analysis.



As shown in Figure 6-3, overall, the participation of minority- and woman-owned businesses in contracts that Caltrans and subrecipient local agencies awarded during the study period was lower than what one might expect based on the availability of those businesses for that work. The disparity index of 74 indicates that minority- and woman-owned businesses considered together received approximately \$0.74 for every dollar that they might be expected to receive based on their availability for the relevant prime contracts and subcontracts that Caltrans and subrecipient local agencies awarded during the study period.

- Three groups exhibited disparity indices substantially below parity—Black American-owned businesses (disparity index of 39), Hispanic American-owned business (disparity index of 69), and Native American-owned businesses (disparity index of 78).
- Non-Hispanic white woman-owned businesses (disparity index of 80) exhibited a disparity that would not be considered substantial.
- Asian Pacific American-owned businesses (disparity index of 106) and Subcontinent Asian American-owned businesses (disparity index of 111) did not exhibit disparities between participation and availability.

Note that Caltrans applied DBE contract goals to many of the contracts that it awarded during the study period so the disparity analysis results shown in Figure 6-3 are reflective of the use of those measures.

### C. Disparity Analysis Results for FHWA-funded Contracts

Caltrans is a recipient of FHWA funds and awarded many FHWA-funded contracts during the study period.<sup>3</sup> Caltrans awarded those contracts using policies and practices that are part of its implementation of the Federal DBE Program including the use of DBE contract goals. Figure 6-4

<sup>3</sup> BBC considered a contract to be FHWA-funded if it included at least one dollar of FHWA funding.

presents disparity analysis results for the FHWA-funded contracts that Caltrans and subrecipient local agencies awarded during the study period to help assess the effectiveness of its implementation of the Federal DBE Program. As shown in Figure 6-4, overall, the participation of minority- and woman-owned businesses in the FHWA-funded contracts that Caltrans and subrecipient local agencies awarded during the study period was substantially lower than what one might expect based on their availability for that work. The disparity index of 75 indicates that minority- and woman-owned businesses considered together received approximately \$0.75 for every dollar that they might be expected to receive based on their availability for the FHWA-funded prime contracts and subcontracts that Caltrans and subrecipient local agencies awarded during the study period.

**Figure 6-4.**  
**Disparity indices for FHWA-**  
**funded contracts**

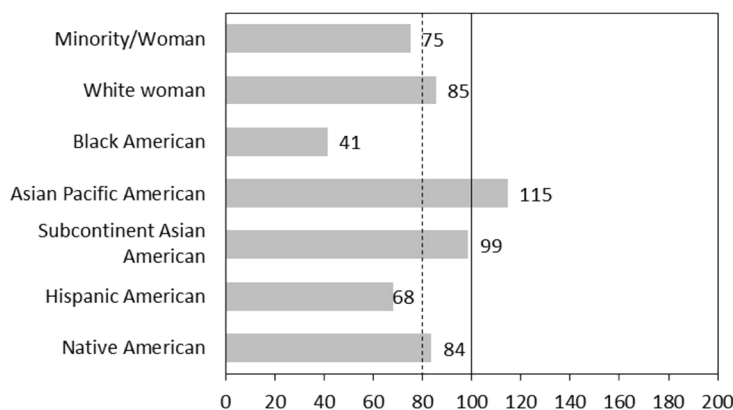
**Note:**

The study team analyzed 14,603 FHWA-funded contracts/subcontracts.

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

**Source:**

BBC Research & Consulting  
disparity analysis.



- Two groups exhibited disparities that were substantially below parity—Black American-owned businesses (disparity index of 41), and Hispanic American-owned businesses (disparity index of 68).
- Three groups exhibited disparities that would not be considered substantial—non-Hispanic white woman-owned businesses (disparity index of 85), Native American-owned businesses (disparity index of 84) and Subcontinent Asian American-owned businesses (disparity index of 99).
- Asian Pacific American-owned businesses did not exhibit a disparity between participation and availability (disparity index of 115).

Note that Caltrans applied DBE contract goals to many of the FHWA-funded contracts that it awarded during the study period so the disparity analysis results shown in Figure 6-4 are reflective of the use of those measures.

## **D. Disparity Analysis Results for State-funded Contracts**

Caltrans did not apply race- or gender-conscious measures to state-funded contracts that it awarded during the study period. That is, the department awarded those contracts in a *race- and gender-neutral environment*. It is instructive for agencies to assess disparities on contracts awarded in a race- and gender-neutral environment to better understand the effect of race- and gender-conscious measures on the participation of minority- and woman-owned businesses.

Figure 6-5 presents disparity analysis results for state-funded transportation contracts that Caltrans awarded during the study period.<sup>4</sup> As shown in Figure 6-5, overall, the participation of minority- and woman-owned businesses in state-funded contracts was lower than what one might expect based on the availability of those businesses for that work. The disparity index of 70 indicates that minority- and woman-owned businesses considered together received approximately \$0.70 for every dollar that they might be expected to receive based on their availability for the state-funded prime contracts and subcontracts that Caltrans awarded during the study period.

- Five groups exhibited disparities that were substantially below parity— non-Hispanic woman-owned businesses (disparity index of 65), Black American-owned businesses (disparity index of 31), Asian Pacific American-owned businesses (disparity index of 72), Hispanic American-owned businesses (disparity index of 73), and Native American-owned businesses (disparity index of 61).
- Subcontinent Asian American-owned businesses did not exhibit a disparity between participation and availability (disparity index of 153).

**Figure 6-5.**  
**Disparity indices for**  
**state-funded contracts**

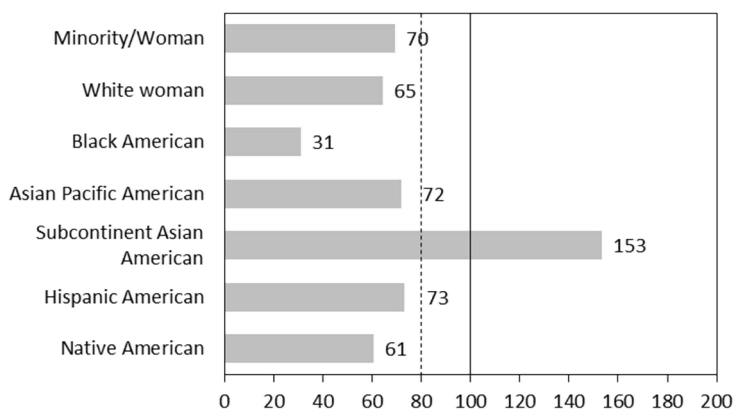
Note:

The study team analyzed 7,064 state-funded contracts/subcontracts.

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

Source:

BBC Research & Consulting disparity analysis.



## E. 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. In other words, a statistically significant difference is a difference that one can consider to be *reliable* or *real*. Random chance is the factor that researchers consider most in determining the statistical significance of results that are based on population samples.

**Monte Carlo analysis.** BBC used a computational algorithm that relies on repeated, random simulations to examine the statistical significance of disparity analysis results. That approach is referred to as a *Monte Carlo* method. The analyses that the study team completed as part of the disparity study were well-suited for using Monte Carlo analysis to test statistical significance. Monte Carlo analysis was appropriate for that purpose, because among the contracts that Caltrans and subrecipient local agencies awarded during the study period, there were many individual chances for businesses to win prime contracts and subcontracts, each with a different

<sup>4</sup> BBC considered a contract to be state-funded if it did not include any federal funding.

payoff (i.e., each with a different dollar value). Figure 6-6 provides additional information about how the study team used a Monte Carlo method to test the statistical significance of disparity analysis results. It is important to note that Monte Carlo simulations may not be appropriate to use with very small populations of contracts.

**Figure 6-6.**  
**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 are 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 non-Hispanic white woman-owned business receiving that contract element were equal to the number of non-Hispanic white woman-owned businesses available for the contract element divided by the total number of businesses available for the contract element. 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 minority- and woman-owned businesses, 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 one million simulations represented a probability distribution of the overall utilization of minority- and woman-owned businesses if contracts were awarded randomly based on the availability of relevant businesses working in the local marketplace.

The output of the Monte Carlo simulations represents the number of simulations out of one million that produced a utilization result that was equal or below the actual observed utilization result for each racial/ethnic and 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 simulations), 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 simulations), then the study team considered that disparity index to be statistically significant at the 90 percent confidence level.

**Results.** BBC identified substantial disparities for various racial/ethnic and gender groups on all contracts considered together and on FHWA- and state-funded contracts considered separately (for details, see Figures 6-3, 6-4, and 6-5). BBC used Monte Carlo analysis to test whether the disparities that the study team observed were statistically significant.

As shown in Figure 6-7, results from the Monte Carlo analysis indicated that the disparities for minority-owned and non-Hispanic white woman-owned businesses on all contracts, FHWA-funded contracts, and state-funded contracts were statistically significant at the 95 percent confidence level. The disparity for Hispanic American-owned businesses on all contracts and federally-funded contracts was statistically significant at the 95 percent confidence level, while the disparity on state-funded contracts was statistically significant at the 85 percent confidence level. Disparities for Native American-owned businesses on all contracts and state-funded contracts were statistically significant at the 90 percent confidence level. The disparity for Asian

Pacific American-owned businesses on state-funded contracts was statistically significant at the 90 percent confidence level.

**Figure 6-7.**  
**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"
<b>All transportation contracts</b>			
<b>Total minority-/woman-owned businesses</b>	74	0	<0.1 %
White woman-owned businesses	80	1	<0.1
Minority-owned businesses	72	0	<0.1
Black American-owned businesses	39	0	<0.1
Asian Pacific American-owned businesses	105	N/A	N/A
Subcontinent Asian American-owned businesses	111	N/A	N/A
Hispanic American-owned businesses	69	19	<0.1
Native American-owned businesses	78	45,846	4.6
<b>Federally funded contracts</b>			
<b>Total minority-/woman-owned businesses</b>	75	0	<0.1 %
White woman-owned businesses	85	2,379	0.2
Minority-owned businesses	72	0	<0.1
Black American-owned businesses	41	0	<0.1
Asian Pacific American-owned businesses	115	N/A	N/A
Subcontinent Asian American-owned businesses	99	484,821	48.5
Hispanic American-owned businesses	68	81	<0.1
Native American-owned businesses	84	164,997	16.5
<b>State-funded contracts</b>			
<b>Total minority-/woman-owned businesses</b>	70	3	<0.1 %
White woman-owned businesses	65	0	<0.1
Minority-owned businesses	71	3,994	0.4
Black American-owned businesses	31	0	<0.1
Asian Pacific American-owned businesses	72	50,194	5.0
Subcontinent Asian American-owned businesses	153	N/A	N/A
Hispanic American-owned businesses	73	52,014	5.2
Native American-owned businesses	61	40,549	4.1

Note: Numbers rounded to nearest tenth of 1 percent.  
Numbers may not add to totals due to rounding.  
N/A – Not applicable – Statistical significance was not calculated in instances where disparities were not present.

Source: BBC Research & Consulting disparity analysis.



# **CHAPTER 7.**

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## **Further Exploration of Disparities**

# CHAPTER 7.

## Further Exploration of Disparities

As presented in Chapter 6, the study team observed disparities between the participation and availability of minority- and woman-owned businesses when analyzing all California Department of Transportation (Caltrans) contracts together and when considering state- and Federal Highway Administration (FHWA)-funded contracts separately. In Chapter 7, six questions provide a framework for further exploration of the disparities that the study team observed between the participation and availability of minority- and woman-owned businesses:

- A. Are there disparities for relevant contracting areas?
- B. Are there disparities for prime contracts and subcontracts?
- C. Are there disparities for large and small prime contracts?
- D. Are there disparities for different time periods?
- E. Are there disparities for different regions in California?
- F. Do bid/proposal processes explain any disparities for prime contracts?

Answers to those questions may be relevant as Caltrans considers how to refine its implementation of the Federal Disadvantaged Business Enterprise (DBE) Program. They may also help Caltrans identify the specific racial/ethnic and gender groups, if any, that might be included in any race- or gender-conscious program measures that the department decides to use in the future.

### **A. Are there Disparities for Relevant Contracting Areas?**

BBC Research & Consulting (BBC) examined disparity analysis results separately for construction and professional services contracts that Caltrans awarded during the study period. That information might help Caltrans refine its implementation of the Federal DBE Program for particular contracting areas. Figure 7-1 presents disparity indices for all relevant racial/ethnic and gender groups separately for construction and professional services contracts that Caltrans and subrecipient local agencies awarded during the study period. Overall, minority- and woman-owned businesses exhibited substantial disparities on both construction contracts (disparity index of 77) and professional services contracts (disparity index of 66). In addition, the study team observed substantial disparities for several individual groups.

- Three minority groups exhibited substantial disparities on construction contracts—Black American-owned businesses (disparity index of 50), Hispanic American-owned businesses (disparity index of 71), and Native American-owned businesses (disparity index of 77).
- Non-Hispanic white woman-owned businesses (disparity index of 89) exhibited disparities on construction contracts that were not substantial.

**Figure 7-1.**  
**Disparity indices for**  
**construction and professional**  
**services contracts**

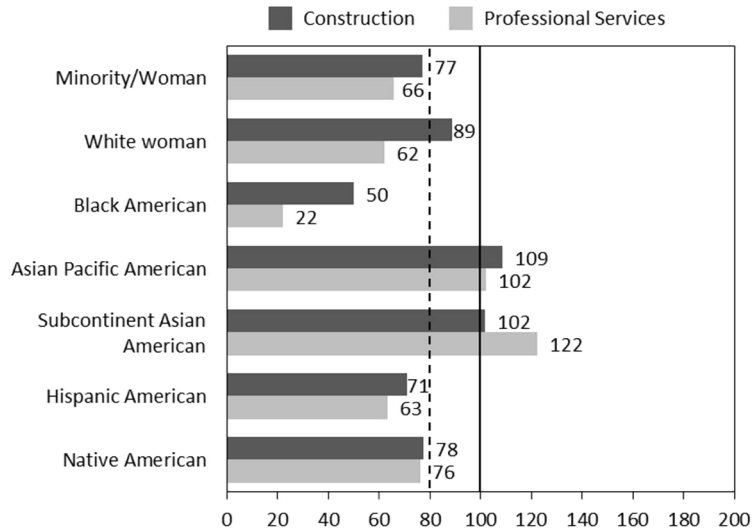
Note:

The study team analyzed 16,831 construction prime contracts/subcontract and 4,836 professional services prime contracts/subcontracts.

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

Source:

BBC Research & Consulting  
disparity analysis.



- Asian Pacific American-owned businesses (disparity index of 109) and Subcontinent Asian American-owned businesses (disparity index of 102) did not exhibit disparities on construction contracts.
- Four groups exhibited substantial disparities on professional services contracts—Black American-owned businesses (disparity index of 22), Hispanic American-owned businesses (disparity index of 63), Native American-owned businesses (disparity index of 76), and non-Hispanic white woman-owned businesses (disparity index of 62).
- Asian Pacific American-owned businesses (disparity index of 102) and Subcontinent Asian American-owned businesses (disparity index of 122) did not exhibit disparities on professional services contracts.

## B. Are there Disparities for Prime Contracts and Subcontracts?

BBC examined disparity analysis results separately for prime contracts and subcontracts to assess whether minority- and woman-owned businesses exhibited different outcomes based on their roles as either prime contractors or subcontractors during the study period. Figure 7-2 presents disparity indices for all relevant racial/ethnic and gender groups separately for prime contracts and subcontracts. Overall, minority- and woman-owned businesses exhibited a substantial disparity on prime contracts (disparity index of 56). Minority- and woman-owned businesses exhibited disparities on subcontracts, but those disparities were not substantial (disparity index of 93). However, the study team observed substantial disparities for several individual groups on both prime contracts and subcontracts.

**Figure 7-2.**  
**Disparity indices for prime contracts and subcontracts**

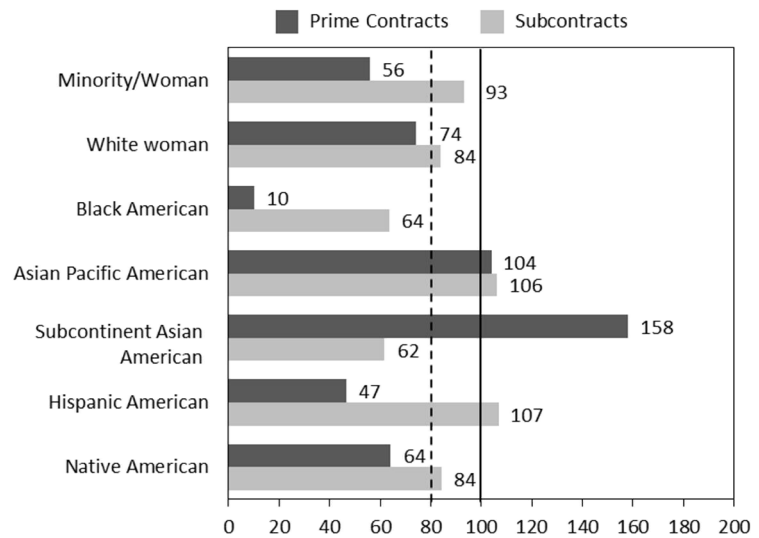
Note:

The study team analyzed 5,085 prime contracts and 16,582 subcontracts.

For more detail, see Figures F-15 and F-16 in Appendix F.

Source:

BBC Research & Consulting disparity analysis.



- Four groups exhibited substantial disparities on prime contracts—Black American-owned businesses (disparity index of 10), Hispanic American-owned businesses (disparity index of 47), and Native American-owned businesses (disparity index of 64), and non-Hispanic white woman-owned businesses (disparity index of 74).
- Asian Pacific American-owned businesses (disparity index of 104) and Subcontinent Asian American-owned businesses (disparity index of 158) did not exhibit disparities on prime contracts.
- Black American-owned businesses (disparity index of 64) and Subcontinent Asian American-owned businesses (disparity index of 62) exhibited substantial disparities on subcontracts.
- Non-Hispanic white woman-owned businesses (disparity index of 84) and Native American-owned businesses (disparity index of 84) exhibited disparities on subcontracts, but those disparities were not substantial.
- Asian Pacific American-owned businesses (disparity index of 106) and Hispanic American-owned businesses (disparity index of 107) did not exhibit disparities on subcontracts.

### C. Are there Disparities for Large and Small Prime Contracts?

BBC compared disparity analysis results for “large” prime contracts and “small” prime contracts that Caltrans and subrecipient 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 professional services contracts worth more than \$500,000. “Small” prime contracts were defined as construction contracts worth \$2 million or less and professional services contracts worth \$500,000 or less. Figure 7-3 presents disparity analysis results for all relevant racial/ethnic and gender groups separately for large and small prime contracts. Overall, minority- and woman-owned businesses exhibited substantial disparities on both small prime contracts (disparity index of 59) and large prime contracts (disparity index of 55). In addition, the study team observed substantial disparities for various individual groups.

**Figure 7-3.**  
**Disparity indices for large and small prime contracts**

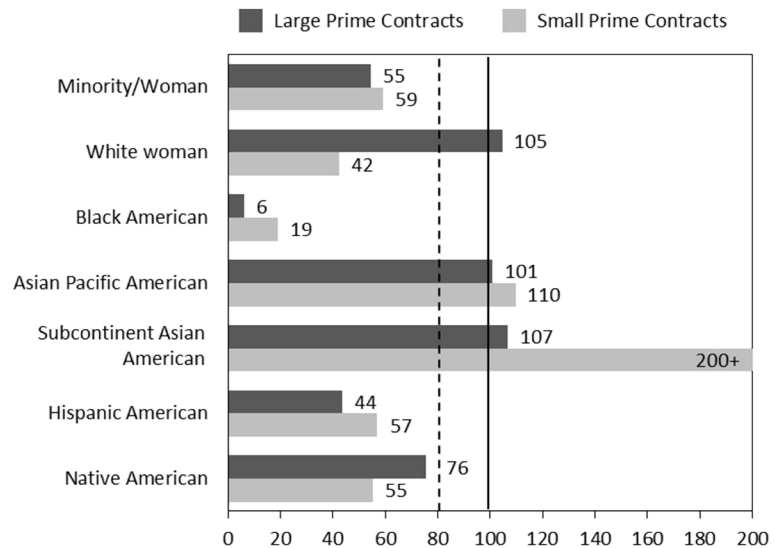
Note:

The study team analyzed 1,315 large prime contracts and 3,770 small prime contracts.

For more detail, see Figures F-31 and F-32 in Appendix F.

Source:

BBC Research & Consulting disparity analysis.



- Four groups exhibited substantial disparities on small prime contracts—non-Hispanic white woman-owned businesses (disparity index of 42), Black American-owned businesses (disparity index of 19), Hispanic American-owned businesses (disparity index of 57), and Native American-owned businesses (disparity index of 55).
- Asian Pacific American-owned businesses (disparity index of 110) and Subcontinent Asian American-owned businesses (disparity index of 200+) did not exhibit disparities on small prime contracts.
- Three groups exhibited substantial disparities on large prime contracts —Black American-owned businesses (disparity index of 6), Hispanic American-owned businesses (disparity index of 44), and Native American-owned businesses (disparity index of 76).
- Three groups did not exhibit disparities on large prime contracts—non-Hispanic white woman-owned businesses (disparity index of 105), Asian Pacific American-owned businesses (disparity index of 101), and Subcontinent Asian American-owned businesses (disparity index of 107).

## D. Are there Disparities for Different Time Periods?

The study team examined disparity analysis results separately for two separate time periods—January 1, 2011 through December 31, 2012 (early study period) and January 1, 2013 through December 31, 2014 (late study period). That information might help Caltrans determine whether there were different outcomes for minority- and woman-owned businesses as the country moved further and further away from the economic downturn that began in 2008. Figure 7-4 presents disparity indices for all relevant racial/ethnic and gender groups separately for the early and late study periods. Overall, minority- and woman-owned businesses exhibited substantial disparities for contracts awarded during the early study period (disparity index of 67) but not during the late study period (disparity index of 84). However, the study team observed substantial disparities for several individual groups during both the early study period and the late study period.

**Figure 7-4.**  
**Disparity indices for early and late study period**

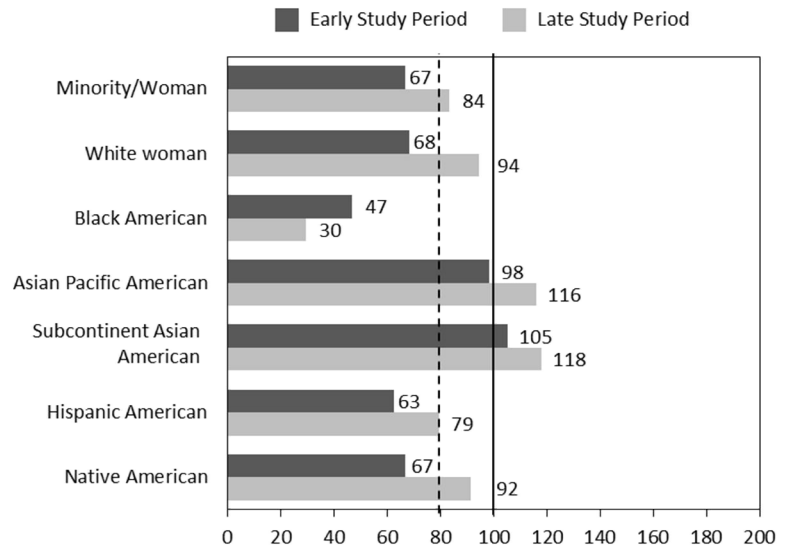
Note:

The study team analyzed 11,940 prime contracts/subcontracts in the early study period and 9,727 prime contracts/subcontracts in the late study period.

For more detail, see Figures F-11 and F-12 in Appendix F.

Source:

BBC Research & Consulting disparity analysis.



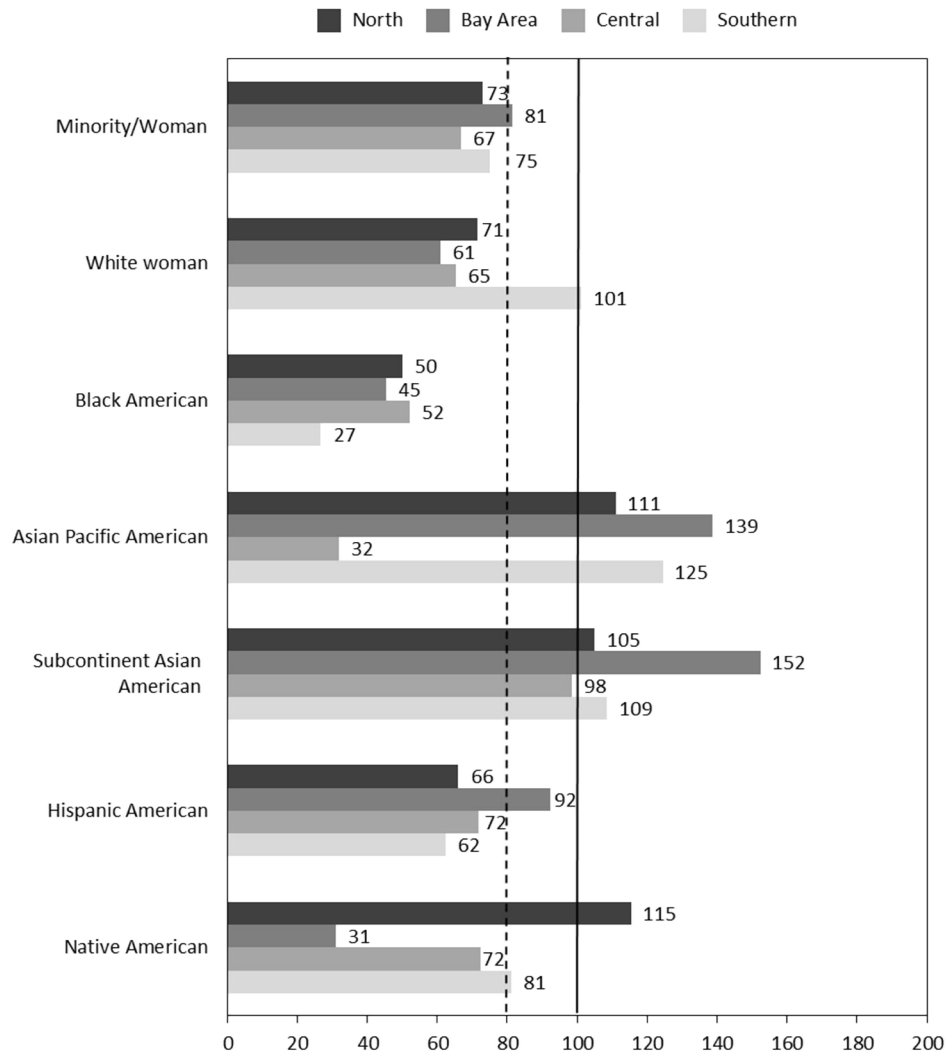
- Four groups exhibited substantial disparities during the early study period—non-Hispanic white woman-owned businesses (disparity index of 68), Black American-owned businesses (disparity index of 47), Hispanic American-owned businesses (disparity index of 63), and Native American-owned businesses (disparity index of 67).
- Asian Pacific American-owned businesses exhibited a disparity that was not substantial in the early study period (disparity index of 98).
- Subcontinent Asian American-owned businesses did not exhibit a disparity during the early study period (disparity index of 105).
- Two groups exhibited substantial disparities during the late study period—Black American-owned businesses (disparity index of 30) and Hispanic American-owned businesses (disparity index of 79).
- Two groups exhibited disparities but were not substantial—non-Hispanic white woman-owned businesses (disparity index of 94) and Native American-owned businesses (disparity index of 92).
- Two groups did not exhibit disparities during the late study period—Asian Pacific American-owned businesses (disparity index of 116) and Subcontinent Asian American-owned businesses (disparity index of 118).

## E. Are there Disparities for Different Regions in California?

The study team examined disparity analysis results separately for four regions throughout the state—Northern California (Caltrans Districts 1, 2, and 3), the Bay area (Caltrans District 4), Central California (Caltrans Districts 5, 6, 9, and 10), and Southern California (Caltrans Districts 7, 8, 11, and 12). That information might help Caltrans determine whether minority- and woman-owned businesses experienced different outcomes depending on the area of the state where the work occurred. Figure 7-5 provides results for all race/ethnic and gender groups for each of the four regions. Overall, minority- and woman-owned firms exhibited substantial disparities in three regions—Northern California (disparity index of 73), Central California (disparity index of

67), and Southern California (disparity index of 75). Minority- and woman-owned businesses also exhibited a disparity in the Bay area, but that disparity was not substantial (disparity index of 81). The study team also observed substantial disparities for several individual groups by region.

**Figure 7-5.**  
**Disparity indices for regions throughout California**



Note: The study team analyzed 5,611 prime contracts/subcontracts in Northern California, 3,535 in the Bay area, 5,374 in Central California, and 7,147 prime contracts/subcontracts in Southern California. For more detail, see Figures F-27, F-28, F-29, and F-30 in Appendix F.

Source: BBC Research & Consulting disparity analysis.

- Non-Hispanic white woman-owned businesses exhibited substantial disparities in three regions of the state—Northern California (disparity index of 71), Bay Area (disparity index of 61), and Central California (disparity index of 65). Non-Hispanic white woman-owned businesses did not exhibit a disparity in Southern California although not substantial (disparity index of 101).
- Black American-owned businesses exhibited substantial disparities in all four regions of the state—Northern California (disparity index of 50), the Bay area (disparity index of 45), Central California (disparity index of 52), and Southern California (disparity index of 27).

- Asian Pacific American-owned businesses exhibited a substantial disparity in the Central region (disparity index of 32) but did not exhibit disparities in the other three regions of the state.
- Subcontinent Asian American-owned businesses exhibited a disparity in Central California although it was not substantial (disparity index of 98). However, Subcontinent Asian American-owned businesses did not exhibit disparities in Northern California (disparity index of 105), the Bay area (disparity index of 152), and Southern California (disparity index of 109).
- Hispanic American-owned businesses exhibited substantial disparities in three regions of the state—Northern California (disparity index of 66), Central California (disparity index of 72), and Southern California (disparity index of 62). Hispanic American-owned businesses exhibited a disparity that was not substantial in the Bay area (disparity index of 92).
- Native American-owned businesses exhibited substantial disparities in two regions—the Bay area (disparity index of 31) and Central California (disparity index of 72). Native American-owned businesses exhibited a disparity that was not substantial in Southern California (disparity index of 81) and did not exhibit a disparity in Northern California (disparity index of 115).

## F. Do Bid/Proposal Processes Explain Any Disparities for Prime Contracts?

The study team completed a case study analysis to assess whether characteristics of Caltrans' bid and proposal evaluation processes help to explain any of the disparities that the study team observed for prime contracts. The study team analyzed bid and proposal information from samples of the contracts that Caltrans awarded during the study period.

**Construction.** The study team examined bid information for a sample of 198 construction contracts that Caltrans Office Engineer (OE) awarded during the study period. In total, Caltrans received 1,129 bids for those contracts.

**Number of bids from minority- and woman-owned businesses.** Minority- and woman-owned businesses submitted 94 of the 1,129 bids (8%) that the study team examined:

- 67 bids (6% of all bids) came from minority-owned businesses (17 different businesses); and
- 27 bids (2% of all bids) came from non-Hispanic white woman-owned businesses (11 different businesses).

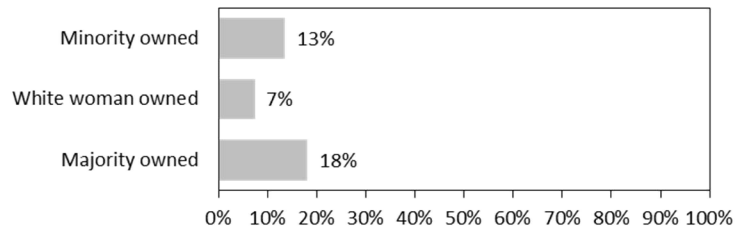
**Success of bids.** The study team also examined the percentage of bids that minority- and woman-owned businesses submitted that resulted in contract awards. As shown in Figure 7-6, 13 percent of the bids that minority-owned businesses submitted resulted in contract awards, which was slightly lower than the percentage of bids that majority-owned businesses submitted that resulted in contract awards. Of the bids that woman-owned businesses submitted, 7 percent resulted in contract awards, lower than the percent of bids that majority-owned businesses submitted that resulted in contract awards.



**Figure 7-6.**  
**Percentage of bids on**  
**construction contracts that**  
**resulted in contract awards**

Note:  
Based on an analysis of 1,129 bids on 198  
contracts.

Source:  
Caltrans OE contracting data.



**Professional services – architecture & engineering (A&E) contracts.** Caltrans typically begins the consultant selection process for a specific engineering-related contract by requesting that consultants respond to requests for qualifications (RFQs), which are evaluated by a committee within Caltrans. (Responses to RFQs are referred to as “proposals” in this report.) The Caltrans committee typically evaluates consultants based on the following criteria:

- Professional excellence, demonstrated competence in the service to be provided, and specialized experience of the prime and subconsultants.
- Education and experience of the Project Manager and other key personnel to be assigned.
- Staffing capability, workload, and record of meeting schedules on similar projects including an assessment of the business’s ability to handle additional work in light of the business’s current workload.
- The nature, quality, and relevance of recently completed work.
- Feasibility of oversight, ability, and willingness to respond to Department requirements and accessibility to Department reviewers.<sup>1</sup>

From the list of consultants that submit proposals, the Caltrans committee short lists the most qualified consultants and grants them interviews. Caltrans typically includes at least the three highest-ranking consultants in the interview process. The committee then determines the award based on an evaluation of the interview based on the project team; the business’s capabilities; the business’s project understanding and approach; and the feasibility of oversight from Caltrans and references. In accordance with regulations regarding qualifications-based evaluations, Caltrans negotiates price after it selects a consultant for award.

BBC analyzed the success of minority- and woman-owned businesses when competing for engineering-related contracts. The study team was able to collect proposal evaluation data for 51 Caltrans engineering-related projects that were executed during the study period. Of the 239 proposals submitted on those contracts, 32 (13%) were submitted by minority-owned businesses and 9 (4%) were submitted by woman-owned businesses.

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<sup>1</sup> This information comes from the Caltrans Standard 215 Agreement Attachment.

There were differences in the percentage of proposals that Caltrans shortlisted by race/ethnicity and gender. The top portion of Figure 7-7 shows that:

- Nineteen proposals (59%) from minority-owned businesses were short-listed;
- Two proposals (22%) from woman-owned businesses were short-listed; and
- About 70 percent of proposal from majority-owned businesses were short-listed.

As shown in the lower portion of Figure 7-7, BBC also calculated the percentage of proposal submissions that resulted in contract awards:

- Two of the 32 proposals from minority-owned businesses resulted in a contract award, a success rate of 6 percent.
- None of the proposals from non-Hispanic white woman-owned businesses resulted in a contract award, a success rate of 0 percent.
- A total of 49 proposals from majority-owned businesses resulted in a contract award, a success rate of 25 percent.

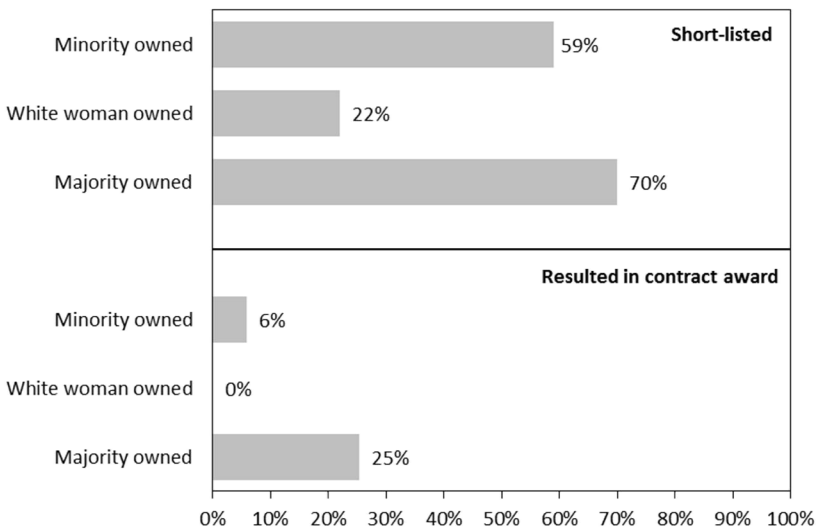
**Figure 7-7.**  
**Proportion of proposals for**  
**Caltrans A&E contracts**  
**that where short-listed and**  
**that resulted in contract**  
**awards, 2011-2014**

Note:

Based on analysis of 239 proposals on 51 contracts.

Source:

Caltrans A&E contracting data.



**Professional services – non-A&E contracts.** The study team examined proposal information for a sample of 22 professional services non-A&E contracts that Caltrans awarded during the study period. In total, Caltrans received 63 proposals for those contracts.

**Number of proposals from minority- and woman-owned businesses.** Minority- and woman-owned businesses submitted 23 of the 63 proposals (37%) that the study team examined:

- Twenty-two proposals (35% of all proposals) came from minority-owned businesses (13 different businesses); and
- One proposal (2% of all proposals) came from a woman-owned business.

**Success of proposals.** The study team also examined the percentage of proposals that minority- and woman-owned businesses submitted that resulted in contract awards. As shown in

Figure 7-8, 23 percent of the proposals that minority-owned businesses submitted resulted in contract awards, which was lower than the percent of proposals that majority-owned businesses submitted that resulted in contract awards. The sole proposal submitted by a woman-owned business did not result in a contract award.

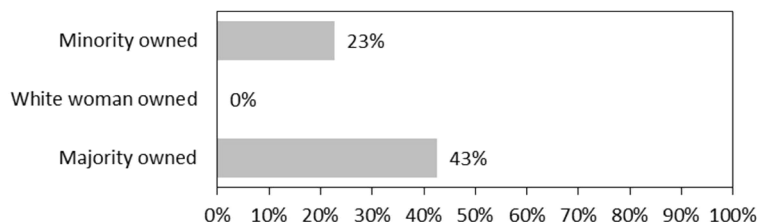
**Figure 7-8.**  
**Percentage of proposals on**  
**non-A&E professional services**  
**contracts that resulted in**  
**contract awards**

Note:

Based on analysis of 63 proposals on 22 contracts.

Source:

Caltrans non-A&E contracting data.



# CHAPTER 8.

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Overall DBE Goal

## CHAPTER 8.

# Overall DBE Goal

As part of its implementation of the Federal Disadvantaged Business Enterprise (DBE) Program, the California Department of Transportation (Caltrans) is required to set an overall goal for DBE participation in its Federal Highway Administration (FHWA)-funded contracts. The Final Rule effective February 28, 2011 revised requirements for goal-setting so that agencies that implement the Federal DBE Program 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 FHWA-funded contracts every year. If DBE participation for a particular year is less than the overall DBE goal for that year, then the agency must analyze the reasons for the difference and establish specific measures that enable the agency to meet the goal in the next year.

Caltrans 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 the agency took to develop the goal. Caltrans last developed an overall DBE goal for FHWA-funded contracts for federal fiscal years (FFYs) 2016 through 2018. The agency established an overall DBE goal of 12.5 percent. Caltrans indicated to FHWA that it planned to meet the goal through the use of a combination of race- and gender-neutral and race- and gender-conscious program measures.

Caltrans is required to develop a new goal for FFYs 2019 through 2021. Chapter 8 provides information that Caltrans might consider as part of setting its new overall DBE goal. Chapter 8 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 DBE goals:

- A. Establishing a base figure; and
- B. Considering 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 Caltrans' FHWA-funded contracts. As presented in Chapter 5, potential DBEs—that is, minority- and woman-owned businesses that are DBE-certified or appear that they could be DBE-certified based on their ownership and annual revenue limits described in 13 CFR Part 121 and 49 CFR Part 26—might be expected to receive 17.6 percent of Caltrans' FHWA-funded prime contract and subcontract dollars based on their availability for that work. Caltrans might consider 17.6 percent as the base figure for its overall DBE goal if it anticipates that the types, sizes, and locations of FHWA-funded contracts that the agency awards in the future will be similar to the FHWA-funded contracts that it awarded during the study period (January 1, 2011 through December 31, 2014).

Figure 8-1 presents the construction and engineering components of the base figure for Caltrans' overall DBE goal. The availability estimates presented in Figure 8-1 are based on the availability of potential DBEs for FHWA-funded prime contracts and subcontracts. The overall base figure reflects a weight of 0.75 for construction contracts and 0.25 for engineering contracts based on the volume of dollars of FHWA-funded contracts that Caltrans and subrecipient local agencies awarded during the study period. If Caltrans 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. Caltrans might also consider evaluating whether the types, sizes, and locations of the FHWA-funded contracts that it awards will change substantially in the future.

**Figure 8-1.**  
**Availability components of**  
**the base figure**  
**(based on availability of**  
**potential DBEs for FHWA-**  
**funded transportation**  
**contracts)**

Note:

Numbers rounded to nearest tenth of 1 percent and thus may not sum exactly to totals.

See Figures F-33, F-34, and F-35 in Appendix F for corresponding disparity results tables.

Source: BBC Research & Consulting availability analysis.

Potential DBEs	Availability Percentage		
	Construction	Professional Services	Weighted Average
Black American owned	1.4 %	2.7 %	1.7 %
Asian Pacific American owned	1.2	2.8	1.6
Subcontinent Asian American owned	0.3	1.0	0.5
Hispanic American owned	8.5	10.2	8.9
Native American owned	0.9	0.6	0.8
White woman owned	3.5	6.1	4.2
<b>Total potential DBEs</b>	<b>15.7 %</b>	<b>23.4 %</b>	<b>17.6 %</b>
<b>Industry weight</b>	<b>75.3 %</b>	<b>25 %</b>	

## B. Considering a Step-2 Adjustment

The Federal DBE Program requires Caltrans to consider a potential step-2 adjustment to its base figure as part of determining its overall DBE goal. Caltrans 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 including:

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.<sup>1</sup>

BBC Research & Consulting (BBC) completed an analysis of each of the above step-2 factors. Much of the information that BBC examined was not easily quantifiable but is still relevant to Caltrans as it determines whether to make a step-2 adjustment.

<sup>1</sup> 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 in 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.<sup>2</sup>*

Figure 8-2 presents past DBE participation based on Caltrans’ Uniform Reports of DBE Awards or Commitments and Payments as reported to FHWA. According to Caltrans’ Uniform Reports, median DBE participation in FHWA-funded contracts from FFYs 2011 through 2015 was 10.7 percent.

**Figure 8-2.**  
**Past certified DBE participation in FHWA-**  
**funded contracts, FFY 2011-2015**

Note Source:  
Commitments/Awards reported on Caltrans’ Uniform Reports of  
DBE Awards/Commitments and Payments.

FFY	DBE Attainment	Annual DBE Goal	Difference
2011	7.2 %	13.5 %	-6.3 %
2012	8.3	13.5	-5.2
2013	10.7	12.5	-1.8
2014	11.9	12.5	-0.6
2015	12.4	12.5	-0.1

The information about past DBE participation supports a downward adjustment to Caltrans’ base figure. If Caltrans were to use the approach that USDOT outlined in “Tips for Goals Setting” based on Uniform Reports of DBE Awards/Commitments and Payments, the overall goal would be the average of the 17.6 percent base figure and the 10.7 percent median past DBE participation, yielding a potential overall DBE goal of 14.1 percent. BBC’s analysis of DBE participation in Caltrans’ FHWA-funded contracts indicates DBE participation (7.4 %) that is also lower than the base figure. If Caltrans were to adjust its base figure based on DBE participation information from the disparity study, it might consider taking the average of the 17.6 percent base figure and the 7.4 percent DBE participation, yielding a potential overall DBE goal of 12.5 percent.

**2. Information related to employment, self-employment, education, training, and unions.** Chapter 2 summarizes information about conditions in the local contracting industry for minorities, women, and minority- and woman-owned businesses. Additional information about quantitative and qualitative analyses of conditions in the local marketplace are presented in Appendices C and D, respectively. BBC’s analyses indicate that there are barriers that certain minority groups and women face related to human capital, financial capital, business ownership,

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<sup>2</sup> 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>

and business success in the California transportation contracting industry. Such barriers may decrease the availability of minority- and woman-owned businesses to obtain and perform the FHWA-funded contracts that Caltrans and subrecipient local agencies award, which supports an upward step-2 adjustment to Caltrans' base figure.

Although it may not be possible to quantify the effects that barriers in human capital, financial capital, and business success may have on the availability of minority- and woman-owned businesses in the local marketplace, the effects of barriers in business ownership can be quantified. BBC used regression analyses to investigate whether race/ethnicity and gender are related to rates of business ownership among workers in the local contracting industry. The regression analyses allowed BBC to examine those relationships while statistically controlling for various race- and gender-neutral personal characteristics including education and age. (Chapter 2 and Appendix C provide details about BBC's regression analyses.) The regression analyses revealed that, even after accounting for various personal characteristics:

- Being Black American or Hispanic American was associated with lower likelihood of owning a construction business compared to being non-Hispanic white, and being a woman was associated with a lower likelihood of owning a construction business compared to being a man; and
- Being Black American, Asian Pacific American, Subcontinent Asian American, or Hispanic American was associated with a lower likelihood of owning an engineering business compared to being non-Hispanic white, and being a woman was associated with a lower likelihood of owning an engineering business compared to being a man.

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 comparable non-Hispanic white men. The results of that analysis—sometimes referred to as a *but for* analysis, because it estimates the availability of minority- and woman-owned businesses *but for* the effects of race- and gender-based discrimination—are presented in Figure 8-3.

The *but for* 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 Caltrans and subrecipient local agencies awarded during the study period). The weights for each industry were based on the proportion of FHWA-funded contract dollars that Caltrans awarded in each industry during the study period (i.e., a 0.75 weight for construction and a 0.25 weight for engineering). In that way, BBC determined a potential adjustment to Caltrans' base figure that attempted to account for race- and gender-based barriers in business ownership in the local contracting industry.

The rows and columns of Figure 8-3 present the following information from BBC's *but for* analysis:

- a. **Current availability.** Column (a) presents the current availability of potential DBEs by racial/ethnic and gender group and by industry, as also presented in Figure 8-1. Each row presents the percentage availability for each racial/ethnic and gender group. Combined, the



current availability of potential DBEs for Caltrans' FHWA-funded contracts is 17.6 percent, as shown in row (19) of column (a).

**Figure 8-3.**  
**Potential step-2 adjustment considering disparities in the rates of business ownership**

Industry 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**
<b>Construction</b>					
(1) Black American	1.4 %	78	1.7 %	1.6 %	
(2) Asian Pacific American	1.2	n/a	1.2	1.1	
(3) Subcontinent Asian American	0.3	n/a	0.3	0.3	
(4) Hispanic American	8.5	79	10.8	10.1	
(5) Native American	0.9	n/a	0.9	0.8	
(6) White woman	3.5	50	7.1	6.6	
(7) Potential DBEs	15.7 %	n/a	22.0 %	20.7 %	15.6 %
(8) All other businesses ***	84.3	n/a	84.3	79.3	
(9) <b>Total firms</b>	<b>100.0 %</b>	n/a	<b>106.2 %</b>	<b>100.0 %</b>	
<b>Professional Services</b>					
(10) Black American	2.7 %	61	4.4 %	4.0 %	
(11) Asian Pacific American	2.8	50	5.6	5.1	
(12) Subcontinent Asian American	1.0	73	1.4	1.2	
(13) Hispanic American	10.2	77	13.2	12.1	
(14) Native American	0.6	n/a	0.6	0.5	
(15) White woman	6.1	77	7.9	7.2	
(16) Potential DBEs	23.4 %	n/a	33.2 %	30.2 %	7.4 %
(17) All other businesses	76.6	n/a	76.6	69.8	
(18) <b>Total firms</b>	<b>100.0 %</b>	n/a	<b>109.8 %</b>	<b>100.0 %</b>	
(19) <b>Total</b>	<b>17.6 %</b>	n/a	n/a		<b>23.0 %</b>

Note: Numbers rounded to nearest tenth of 1 percent and thus may not sum exactly to totals due to rounding.

\* 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 FHWA-funded contract dollars in each industry (construction = 0.75 and engineering=0.25).

\*\*\* All other businesses included majority-owned businesses and minority- and woman-owned businesses that were not potential DBEs.

Source: BBC Research & Consulting.

**b. Disparity indices for business ownership.** For each group that is significantly less likely than similarly-situated non-Hispanic white men to own construction and engineering businesses, BBC simulated business ownership rates if those groups owned businesses at the same rate as non-Hispanic white men who share similar race- and gender-neutral personal characteristics.

To simulate business ownership rates if minorities and women owned businesses at the same rate as non-Hispanic white men in a particular industry, BBC took the following steps: 1) BBC performed a probit regression analysis predicting business ownership including only workers who were non-Hispanic white men in the dataset; and 2) the study team then

used the coefficients from that model and the mean personal characteristics of individual minority groups (or non-Hispanic white women) working in the industry (i.e., personal characteristics, indicators of educational attainment, and indicators of personal financial resources and constraints) to simulate business ownership for each group.

The study team then calculated a business ownership disparity index for each group by dividing the observed business ownership rate by the simulated 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 men who share similar 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 (6) of column (b), non-Hispanic white women own construction businesses at 50 percent of the rate that they would be expected to own construction businesses if they were non-Hispanic white men with similar personal characteristics.

- c. **Availability after initial adjustment.** Column (c) presents availability estimates by racial/ethnic and gender 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 men to own 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" in column (c)—in row (9) for construction and row (18) for engineering—and multiplying by 100. For example, the scaled availability estimate for non-Hispanic white woman-owned construction businesses shown in row (6) of column (d) was calculated in the following way:  $(7.1\% \div 106.2\%) \times 100 = 6.6$  percent.
- e. **Components of goal.** Column (e) shows the component of the total base figure attributed to the adjusted availability of minority- and woman-owned businesses 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 row (16) for engineering—and multiplying it by the proportion of total FHWA-funded contract dollars for which each industry accounts (i.e., 0.75 for construction and 0.25 for engineering). For example, BBC used the 20.7 percent shown in row (7) of column (d) for construction and multiplied it by 0.75 for a result of 15.6 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—23.0 percent, as shown in the bottom row of column (e).

Based on information related to business ownership alone, Caltrans might consider adjusting the base figure upward to 23 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 also revealed quantitative and qualitative evidence that minorities, women, and minority- and woman-owned businesses in California do not have the same access to those business inputs as non-Hispanic white men and businesses owned by non-Hispanic white men (for details, see Chapter 2 and Appendices C and D). Any barriers to obtaining financing, bonding, and insurance might limit opportunities for minorities and women to successfully form and operate businesses in the California contracting marketplace. Any barriers that minority- and woman-owned businesses face in obtaining financing, bonding, and insurance would also place those businesses at a disadvantage in competing for Caltrans' FHWA-funded prime contracts and subcontracts. Thus, information from the disparity study about financing, bonding, and insurance also supports an upward step-2 adjustment to Caltrans' base figure.

**4. Other factors.** The Federal DBE Program suggests that federal fund recipients also examine "other factors" when determining whether to make step-2 adjustments to their base figures.<sup>3</sup>

**Success of businesses.** There is quantitative evidence that certain groups of minority- and woman-owned businesses are less successful than businesses owned by non-Hispanic white men and face greater barriers in the marketplace, even after accounting for race- and gender-neutral factors. Chapter 3 summarizes that evidence and Appendix C presents corresponding quantitative analyses. There is also qualitative evidence of barriers to the success of minority- and woman-owned businesses, as presented in Appendix D. Some of that information suggests that discrimination based on race/ethnicity and gender adversely affects minority- and woman-owned businesses in the local contracting industry. Thus, information about the success of businesses also supports an upward step-2 adjustment to Caltrans' base figure.

**Evidence from disparity studies conducted within the jurisdiction.** USDOT suggests that federal aid recipients also examine evidence from disparity studies conducted within their jurisdictions when determining whether to make step-2 adjustments to their base figures. BBC recently conducted disparity studies for three other California transportation agencies. Caltrans should review results from those disparity studies when determining its overall DBE goal. However, Caltrans should note that the results of those studies are tailored specifically to the contracts and policies of each agency. Those contracts and policies may differ in many important respects from those of Caltrans.

**Summary.** Taken together, the quantitative and qualitative evidence that the study team collected as part of the disparity study may support a step-2 adjustment to the base figure as Caltrans considers setting its overall DBE goal. 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.<sup>4</sup>*

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<sup>3</sup> 49 CFR Section 26.45.

<sup>4</sup> USDOT. "Tips for Goal-Setting in the Federal Disadvantaged Enterprise (DBE) Program." <http://www.osdbu.dot.gov/DBEProgram/tips.cfm>.

Based on information from the disparity study, there are reasons why Caltrans might consider an adjustment to its base figure:

- Caltrans might adjust its base figure upward to account for barriers that minorities and women face in human capital and owning businesses in the local contracting industry. Such an adjustment would correspond to a “determination of the level of DBE participation you would expect absent the effects of discrimination.”<sup>5</sup>
- Evidence of barriers that affect minorities, women, and minority- and woman-owned businesses in obtaining financing, bonding, and insurance, and evidence that certain groups of minority- and woman-owned businesses are less successful than comparable businesses owned by non-Hispanic white men also supports an upward adjustment to Caltrans’ base figure.
- Caltrans 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. Caltrans’ utilization reports for FFYs 2011 through 2015 indicated median annual DBE participation of 10.7 percent for those years, which is lower than its 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. BBC’s analysis of DBE participation in Caltrans’ FHWA-funded contracts also indicates DBE participation (7.4%) that is lower than the base figure. If Caltrans were to adjust its base figure based on DBE participation information from the disparity study, it might consider taking the average of its base figure and the 10.7 percent DBE participation.

USDOT regulations clearly state that an agency such as Caltrans 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, *Tips for Goal-Setting* states that an agency such as Caltrans 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.

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<sup>5</sup> 49 CFR Section 26.45 (b).

# CHAPTER 9.

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## Program Measures

## CHAPTER 9.

# Program Measures

As part of implementing the Federal Disadvantaged Business Enterprise (DBE) Program, the California Department of Transportation (Caltrans) uses a combination of *race- and gender-neutral measures* and *race- and gender-conscious measures* to encourage the participation of minority- and woman-owned businesses in its contracting. Race- and gender-neutral measures are measures that are designed to encourage the participation of all businesses—or, all small businesses—in an agency’s contracting. Participation in such measures is not limited to minority- or woman-owned businesses or to certified DBEs. In contrast, race- and gender-conscious measures are measures that are designed to specifically encourage the participation of minority- and woman-owned businesses in an agency’s contracting (e.g., using DBE goals on individual contracts).

To meet the *narrow tailoring* requirement of the strict scrutiny standard of constitutional review, agencies that implement the Federal DBE Program must meet the maximum feasible portion of their overall DBE goals through the use of race- and gender-neutral measures.<sup>1</sup> If an agency cannot meet its overall DBE goal through the use of race- and gender-neutral measures alone, then it must consider also using race- and gender-conscious measures. When submitting its overall DBE goal to the United States Department of Transportation (USDOT), an agency must project the portion of its overall DBE goal that it expects to meet through race- and gender-neutral measures and what portion it expects to meet through race- and gender-conscious measures. 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,” which addresses factors for federal-aid recipients to consider when projecting the portions of their overall DBE goals that they will meet through the use of race- and gender-neutral measures;<sup>2</sup>
- USDOT’s “Tips for Goal-Setting,” which suggests factors for federal-aid recipients to consider when making such projections;<sup>3</sup> and
- Federal Highway Administration (FHWA) template, which describes how it considers approving DBE goal and methodology submissions AND includes a section on projecting the percentage of overall DBE goals to be met through race- and gender-neutral and race- and gender-conscious measures. Figure 9-1 presents an excerpt from that template.

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<sup>1</sup> 49 CFR Section 26.51.

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

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

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 such 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?<sup>4</sup>
- 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 9 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?**

As presented in Chapter 2, Appendix C, and Appendix D, BBC Research & Consulting (BBC) examined conditions in the California marketplace related to human capital, financial capital, business ownership, and the success of businesses. There is substantial quantitative evidence of barriers for minority- and woman-owned businesses overall and for specific groups concerning the above business inputs and outcomes. Qualitative information also indicated evidence of discrimination affecting the local marketplace. Caltrans 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 gender-neutral measures alone.

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

Figure 9-2 presents the participation of certified DBEs in Caltrans' federally funded transportation contracts in recent years, as presented in Caltrans reports to USDOT. Based on

#### **Figure 9-1. 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 race-neutral measures it employs and information on contracting in the recipient's contracting area. Information that could be relied on includes: the extent of participation of DBEs in the recipient's contracts that do not have contract goals; past prime contractors' achievements; excess DBE achievements over past goals; how many DBE primes have participated in the state's programs in the past; or information about state, local or private contracting in similar areas that do not use contracting goals and how many minority and women's businesses participate in programs without goals.

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<sup>4</sup> 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 contract goals; and (c) overall utilization for other state/ local or private sector contracting where DBE contract goals were not used.

information about awards and commitments to DBE-certified businesses, Caltrans has not met its overall DBE goal in recent years. In federal fiscal years (FFYs) 2011 through 2015, DBE awards and commitments on FHWA-funded contracts was below Caltrans' overall DBE goal by an average of 3.5 percentage points. However, in the last three years, Caltrans was closer to meeting its overall DBE goal. Caltrans applied race- and gender-conscious DBE contract goals to many FHWA-funded transportation contracts during those years.

**Figure 9-2.**  
**Past certified DBE participation on FHWA-funded contracts, FFY 2011-2015**

Source:

California Department of Transportation Federal Highway Administration  
Overall Disadvantage Business Enterprise Goal and Methodology for Federal  
Fiscal Years 2013-2015 and 2016-2018

FFY	DBE Attainment	Annual DBE Goal	Difference
2011	7.2 %	13.5 %	-6.3 %
2012	8.4	13.5	-5.1
2013	10.7	12.5	-1.8
2014	11.9	12.5	-0.6
2015	12.4	12.5	-0.1

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

Caltrans applied race- and gender-conscious measures to most FHWA-funded transportation contracts the study period (January 1, 2011 through December 31, 2014). However, Caltrans did not apply race- or gender-conscious measures to any state-funded contracts during that time period because of Proposition 209. Proposition 209, which California voters passed in November 1996, amended state law to prohibit discrimination and the use of race- and gender-based preferences in public contracting, public employment, and public education. Thus, Proposition 209 prohibited government agencies in California from using race- and gender-conscious measures when awarding state-funded contracts (but not federally-funded contracts). DBE participation in the state-funded contracts that Caltrans awarded during the study period was 4.3 percent, lower than in contracts to which race- and gender-based measures applied (7.4%).

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

When determining the extent to which Caltrans could meet its overall DBE goal through the use of race- and gender- neutral measures, the department should review the neutral measures that it and other local organizations already have in place. BBC reviewed race- and gender-neutral measures that Caltrans currently uses to encourage the participation of minority- and woman-owned businesses in its contracting. In addition, BBC reviewed race- and gender-neutral measures that other agencies in California use.

**Caltrans' race- and gender-neutral measures.** Caltrans uses myriad race- and gender-neutral measures to encourage the participation of small businesses—including many minority- and woman-owned businesses—in its contracting. Caltrans uses the following types of race- and gender-neutral measures as part of its efforts to comply with the Federal DBE Program:

- Business outreach and communication;
- Technical assistance;



- Improved contracting processes;
- Finance and bonding programs;
- Prompt payment; and
- Data collection, monitoring, and reporting.

**Business outreach and communication.** Caltrans conducts several outreach and communication efforts across the state of California to encourage the participation and growth of small businesses and minority- and woman-owned businesses. Beginning in 2009, Caltrans successfully appointed small business liaisons in each of its 12 district offices. The district small business liaisons (DSBLs) act as points of contact for small businesses including DBEs and many other minority- and woman-owned businesses. The liaisons help prime contractors identify potential subcontractors. The DSBLs also lead more focused outreach such as local procurement fairs, workshops, and small business events. In 2014, DSBLs conducted and attended 169 different events throughout the state of California serving more than 17,600 individuals. DSBLs are also primarily responsible for facilitating various outreach efforts including:

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

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

Trade association meetings. Each quarter, Caltrans hosts stakeholder meetings with major construction and engineering trade associations including the Associated General Contractors of America, the American Council of Engineering Companies, United Contractors, and the Infrastructure Delivery Council. Caltrans hosts those meetings at its headquarters and facilitates them in partnership with a representative from each organization. The quarterly meetings center around construction and engineering contracting and address various topics including project advertisement and schedule; DBE updates; safety topics; project specifications; and new business opportunities. Between 10 and 25 members of each organization typically attend the meetings.<sup>5</sup>

Small Business Council meetings. Caltrans hosts Small Business Council (SBC) meetings with members of associations that represent small businesses. Member associations must be small business trade associations representing at least 35 members who are organized under the laws of California and have small business interests in Caltrans contracts and projects (specifically, construction; commodities; and architecture and engineering). The locations for the statewide SBC meetings alternate between Caltrans headquarters in Sacramento and various district

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<sup>5</sup> Individuals must be members of the AGC, ACEC, United Contractors, or IDC in order to attend the quarterly meetings.

offices throughout California. Caltrans uses the meetings to provide information on future contract opportunities and to engage small businesses and minority- and woman-owned businesses in the Caltrans contracting process. In addition, the statewide SBC holds committee meetings that cover more detailed topics related to construction, engineering, and commodities contracting. The committees are responsible for discussing those issues and presenting recommendations to the main membership body.

The Office of Business and Economic Opportunity (OBE) manages invitations to the Caltrans statewide SBC meetings. The meetings are not exclusive to members. Non-members who are interested in the meetings can also attend. In addition to the statewide SBC meetings, other Caltrans districts organize their own SBC meetings to focus on local issues. Currently, Districts 4, 7, 8, 11, and 12 convene their own meetings.

**Small Business Administration (SBA) and 8(a) Business Development Program meetings.**

Caltrans representatives attend SBA and 8(a) Business Development Program outreach events to encourage small businesses, including many minority- and woman-owned businesses, to participate in public contracting in the state of California. Small businesses attend those meetings to network and partner with other businesses. Recent outreach events have drawn between 75 and 300 individuals depending on the location of the event.

***Website communications.*** Caltrans revises and updates the OBE website often. The website currently provides access to various resources including links to relevant information such as:

- DBE certification database;
- DBE certification workshop presentation, guidelines, frequently asked questions, instructions, and application;
- Supportive services programs and resources;
- Technical assistance resources; and
- Contact information for each DSBL.

Caltrans also maintains a centralized calendar of events to highlight outreach opportunities throughout the state. DSBLs are responsible for entering event information into the calendar.

***Advertisements of contract opportunities.*** In addition to attending meetings, events, or accessing the OBE website, there are several other ways for small businesses, including many minority- and woman-owned businesses, to find out about contract opportunities with Caltrans.

**Weekly advertisements.** Each week, on the Office Engineer website, Caltrans provides a complete list of all projects currently out for bid as well as a list of upcoming projects. All advertisements are refreshed and updated on a weekly basis. Caltrans also provides useful links for contractors that want to see contract documents, order bid books, place prime contractor advertisements, opt-in to particular contracts, or see planholders lists.

**Project look ahead.** Caltrans also provides a “project look ahead” database for information on upcoming projects statewide. Contractors can create an account with Caltrans to receive

automated emails when projects are added or modified and get customized views of projects in specific areas. DSBLs also provide “look ahead” information at local workshops and events.

Caltrans Connect. Caltrans Connect is a special feature on the Office Engineer website that lets contractors manage the projects in which they are interested and for which they are advertising subcontracting opportunities. Caltrans Connect allows contractors to input basic firm qualifications and contact information. Contractors can modify that information and can also download bid documents for e-advertised projects. Contractors are also able to “opt in” using the Caltrans Connect feature to communicate that they are interested in subcontracting or supplying materials to prime contractors. Registration and use of Caltrans Connect is free to all contractors.

Planholders search. Planholders lists are composed of contractors who have ordered bid books for a particular project. Planholders lists are updated immediately when a bidder places its order for a bid book online. Caltrans provides a planholders search that offers an up-to-the-minute view of who is bidding on all currently-advertised projects. The planholders search provides options for searching by DBE or small business status to help meet any contract goals.

FI\$cal/Cal eProcure. Cal eProcure is an online portal that contractors can use to access advertised bid opportunities with the state of California in the California State Contracts Register. Contract opportunities are posted online and distributed to contractors who are registered through Cal e-Procure.

***Other outreach events and workshops.*** Caltrans participates in a number of outreach events and workshops, some of which are organized by Caltrans Headquarters and others by Caltrans local district offices. The most notable workshops and outreach events that Caltrans hosts include the following.

Certification workshops. Caltrans provides certification workshops for potential DBEs across the state. The two-hour workshops are typically hosted by Caltrans headquarters in varying districts, and cover topics such as certification requirements and guidelines for completing the certification application. In 2014, Caltrans headquarters hosted two certification workshops.

Procurement fairs. Caltrans hosted two procurement fairs in 2014. For each half-day fair, purchasers from each Caltrans division and local purchasing partners were invited to have face-to-face discussions with small business owners. Approximately 750 small business owners attended the procurement fairs.

Mock contract workshops. Four districts currently provide mock contract workshops. Caltrans plans to expand the availability of these workshops statewide. The mock contract workshops assist small businesses in learning how to do business with Caltrans. Mock contract workshops teach contractors how to bid, how to estimate, how to navigate the Caltrans website, and how to execute contract work once a contract is awarded. Subcontractors also learn from prime contractors what qualifications they seek in a subcontractor.

Mandatory pre-bid (MPB) meetings. Caltrans holds MPB meetings for construction contracts within a suggested project size or cost range. Projects worth at least \$3.2 million dollars and last

at least 82 calendar days are eligible. When a project is selected for an MPB meeting, prime contractors are required to be present in order to be eligible to bid on the contract. MPB meetings are also open to other interested businesses—including small businesses; DBEs; and minority- and woman-owned businesses—to network with prime contractors and to express their interest in performing work as subcontractors or suppliers.

**Architecture & engineering contract outreach events.** Architectural and engineering contract outreach events may be held for architectural and engineering contracts. The outreach is selected on an as-needed basis. Prior to advertising the project, Caltrans may schedule an outreach event. Caltrans invites prime consultants as well as small businesses, disabled veteran business enterprises, DBEs, minority-owned businesses, and woman-owned businesses that could perform as subconsultants on the contract.

**Pre-proposal conferences.** Caltrans may host pre-proposal conferences for engineering contracts, either in person or via teleconference. These conferences are offered on an as-needed basis. The pre-proposal conference occurs early in the advertisement period and attendance is optional. During the conferences, the contract manager discusses the project's scope of work, and the DPAC representative provides tips on how to submit a responsive bid.

**Technical assistance.** Although Caltrans does not currently have partnerships with outside resource centers, the department anticipates developing such partnerships in the coming years as the Office of Business and Economic Opportunity's new executive management team creates new relationships. Small Business Development Centers are also available for businesses looking for assistance. DSBLs can direct businesses to a local small business development center as appropriate.

**One-on-one consultations.** Caltrans DSBLs and other small business staff offer one-on-one technical assistance via telephone or in person to small businesses including many minority- and woman-owned businesses. Businesses can request assistance related to navigating contracting documents, the DBE certification process, the opt-in process, and other topics.

**Mentor-protégé program.** Caltrans offers two mentoring programs: the Calmentor program for small engineering businesses and the Mentor-Protégé program for small construction businesses. Both programs provide small businesses with opportunities to participate in a mentor-protégé-type relationship with larger, more successful businesses working in similar industries. Calmentor is a statewide program, available in all 12 districts whereas Mentor-Protégé is only available in District 4 but will be expanded statewide. In 2014, Caltrans hosted seven events in different districts throughout California to encourage prime contractor participation in the Calmentor and Mentor-Protégé programs. Caltrans has initiated about 350 mentor-protégé pairings and graduated almost 200 businesses since the programs' inception.

**Improved contracting practices.** Similar to other public agencies in California, Caltrans uses a competitive, low-bid system for selecting construction contractors and a qualifications-based system for awarding most engineering-related contracts. In 2013, Caltrans took action to improve the contracting by ensuring that "full, complete, and accurate plans and specifications and estimates of costs" would enable "any competent mechanic or other builder to carry them out." Caltrans created a "Ready to List and Construction Contract Award Guide" through the

Division of Engineering Services – Office Engineer in order to establish uniform procedures; define responsibilities; and provide guidance for preparing construction contract documents.

According to Caltrans' 2016 DBE Goal and Methodology Report, Caltrans reviews all upcoming contracts for unbundling opportunities. Unbundling requests can come from any division, committee, or agency interested in determining if the contracts for their division could be unbundling. Requests are made to the corresponding chief of division (such as Environmental Planning, Construction, Design, etc.). Based on recent data, more than 50 percent of Caltrans construction projects are worth less than \$3 million. In the previous disparity study, interviewees commented that the typical size of a Caltrans contract precludes many small businesses, including many minority- and woman-owned businesses, from bidding on that work. Caltrans assessed those comments and made efforts to unbundle construction and engineering contracts into smaller units based on both dollars and items of work.

**Finance and bonding programs.** Caltrans participates in the USDOT Bonding Education Program (BEP) in partnership with the Surety and Fidelity Association of America. The program assists participants in obtaining surety bonds and increasing bond capacity. A series of five workshops are held to educate participants on industry challenges and how to conduct business with local, state, and federal transportation agencies.

**Prompt payment.** Caltrans provides several references to prevailing wage agreements and prompt payment clauses within its contracting language. Payment-related contracting language is in accordance with prompt payment code sections 927-927.12 in Government Code Chapter 4.5, also known as the California Prompt Payment Act (Act). According to the Act, invoices are to be paid within 45 days of receipt. In addition, Caltrans makes efforts to monitor payments for each project to ensure that small businesses, including many minority- and woman-owned businesses, are participating in contracts in a manner that is consistent with commitments that prime contractors made to them at the time of award. For engineering contracts, the contract manager is responsible for monitoring payments to subcontractors. The ADM-3069 and ADM-3069AE forms for DBE Utilization Reports request information for all subcontractors. If prime contractors do not submit these forms with each invoice, the contract manager withholds 25 percent of payment until the forms are provided. For construction contracts, the resident engineer monitors first-tier subcontractor participation on the job site. Construction contract forms, including Forms 1201 and 2402, capture commitment and payment data when the project is awarded and completed.

**Data collection, monitoring, and reporting.** Caltrans is strongly considering the implementation of a database system to better track subcontractors and the payments that they receive from prime contractors. OBEO is currently working with other divisions to implement a database (ETAS2) that will simplify data collection and reporting by capturing all contracting and construction management activities directly from prime contractors. In its current system, Caltrans relies on hardcopy scanning. The database system will solve inefficiencies in its current process.

**Other agencies' race- and gender-neutral measures.** In addition to the race- and gender-neutral program measures that Caltrans currently uses, there are a number of race- and gender-neutral measures that other agencies in California use to encourage the participation of minority- and woman-owned businesses. Figure 9-3 provides examples of those measures.

**Figure 9-3.**  
**Examples of race- and gender-neutral measures that other agencies in California use**

Neutral remedies	
<b>Technical assistance</b>	<p>Technical assistance including small business training is widely available throughout Southern California. Programs primarily provide general information and assistance for business start-ups and growing businesses but also include industry-specific training. Examples range from general support providers such as SCORE to industry-specific training opportunities such as the California Construction Contracting Program located within existing small business development centers across the region.</p> <p>Other programs focus on market development assistance and use of electronic media and technology. Those assistance programs are available through organizations such as the Pace Business Development Center and Procurement Technical Assistance Centers throughout the state. More locally focused programs include free opportunities provided by Pasadena City College small business entrepreneurial service and training academy (BEST) and the City of Pasadena; Foothill Workforce Investment Board; and the Pasadena Chamber of Commerce, Art of Small Business seminar.</p>
<b>Small business finance</b>	<p>Small business financing is available through several local agencies within Southern California. For example, the Pace Business Development Center in Los Angeles supports start-ups with loan package preparation and capital acquisition through financial institutions guaranteed by the SBA. The Southern California Small Business Development Corporation also offers financing assistance with the support of the State of California with offices located in Glendale and Los Angeles. Other local organizations, including minority and regional chambers, provide training and support on how to obtain financing and prepare funding documents.</p>
<b>Bonding programs</b>	<p>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.</p> <p>Local agencies also have bonding programs including the City of Los Angeles Bonding Assistance Program and the Los Angeles World Airports (LAWA) bonding program. Those programs offer individual counseling and training in addition to bid, performance, and bond guarantees.</p> <p>Training on how to obtain a bond is also provided by a number of different agencies including the Los Angeles Unified School District Small Business Bootcamp and Bond Works Program. The school district's program prepares contractors to manage cash flow and taxes and provides training on credit worthiness criteria in the bond approval process.</p>
<b>Mentor-protégé programs</b>	<p>The AGC of California partners with local agencies for a mentor-protégé program in an effort to increase diversity and develop new and emerging businesses in the construction industry. The program is modeled after the Port of Portland's Mentor-Protégé Program. AGC also partners with ACE program in support of "junior mentor" opportunities for high school students interested in construction, architecture, or engineering.</p> <p>SBA 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, the exploration of joint venture and subcontractor opportunities for federal contracts.</p>

Source: BBC Research & Consulting.

# **CHAPTER 10.**

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## **Recommendations and Conclusions**

# CHAPTER 10.

## Recommendations and Conclusions

Chapter 10 reviews recommendations and conclusions relevant to the California Department of Transportation (Caltrans') implementation of specific components of the Federal Disadvantaged Business Enterprise (DBE) Program for Federal Highway Administration (FHWA)-funded contracts. In addition, Chapter 10 presents considerations that the department should make as it works to refine its implementation of the Federal DBE Program.

### A. Federal DBE Program

Regulations presented in 49 Code of Federal regulations (CFR) Part 26 and associated documents offer 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.<sup>1</sup>

**Reporting to DOT – 49 CFR Part 26.11 (b).** Caltrans must periodically report DBE participation in its FHWA-funded contracts to the United States Department of Transportation (USDOT). Caltrans uses ADM-3069 forms to track payments towards all subcontractors, including DBEs, for architectural & engineering and professional services projects. As of March 2015, Caltrans requires that prime construction contractors submit monthly CEM-2406 forms documenting payments made towards DBEs for work performed in the previous month. The resident engineer of each project is required to email a copy of the form to the Office of Business and Economic Opportunity (OBE0). Caltrans uses information as reported on ADM-3069 and CEM-2406 forms to calculate DBE participation that it reports to FHWA. Caltrans should continue to collect information about DBE participation through monthly invoices and might consider collecting information about non-DBE subcontractors as well.

**Bidders list – 49 CFR Part 26.11 (c).** As part of its implementation of the Federal DBE Program, Caltrans must develop a bidders list of businesses that are available for its contracts. The bidders list must include the following information about each available business:

- Firm name;
- Address;
- DBE status;
- Age of firm; and
- Annual gross receipts.

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<sup>1</sup> Because only certain portions of the Federal DBE Program are discussed in Chapter 10, Caltrans should refer to the complete federal regulations when considering its implementation of the program.



Caltrans does not currently maintain a bidders list that includes all of the above information for businesses bidding or proposing on the department's FHWA-funded prime contracts and subcontracts and should ensure that it complies with Section 26.11 (c). Compliance could occur by adding to current bidders lists; working with the OBEO on a Caltrans-wide bidders list; or incorporating information from ADM-3069 forms, CEM-2406 forms, and the availability analysis.

**Information from availability surveys.** As part of the availability analysis, the study team collected information about local businesses that are potentially available for different types of Caltrans prime contracts and subcontracts. Caltrans should consider using that information to augment its current bidders list.

**Maintaining comprehensive vendor data.** In order to effectively track the participation of minority- and woman-owned businesses on its contracts, Caltrans should consider continuing to improve the information that it collects on the ownership status of businesses that participate in its contracts, including both prime contractors and subcontractors. Not only should Caltrans 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. As appropriate, Caltrans can use business information that the study team collected as part of the 2016 disparity study to augment its vendor data.

**Prompt payment mechanisms – 49 CFR Part 26.29.** Caltrans' prompt payment requirements appear to comply with California state code section 927-927.12 in Government Code Chapter 4.5, also known as the California Prompt Payment Act (Act). According to the Act, invoices are to be paid within 45 days of receipt. In addition, Caltrans makes efforts to monitor payments for each project to ensure that small businesses, including many minority- and woman-owned businesses, are participating in contracts. Qualitative information that the study team collected through in-depth interviews revealed that some subcontractors are dissatisfied with how promptly they receive payment from prime contractors. Caltrans should consider increasing its efforts to ensure prompt payment to both prime contractors and subcontractors.

**DBE directory – 49 CFR Part 26.31.** Caltrans is required to maintain a directory that lists all DBEs that are eligible to participate in its contracts, including information about each business' address, phone number, and relevant types of work. Caltrans offers a directory on its website of all DBE-certified businesses, searchable by: business name, industry code, industry type, race and ethnicity of ownership, and geographical location.<sup>2</sup> Caltrans directs prime contractors and other interested businesses to the DBE Directory to obtain information about eligible DBEs that are qualified to participate in its contracts. Qualitative information that the study team collected through in-depth interviews indicated that business owners and managers are aware of the directory, but some are concerned that the DBE directory is not current. Caltrans might consider working to more regularly update the DBE directory so that prime contractors are better aware of qualified DBE subcontractors.

**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 over-

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<sup>2</sup> [http://www.dot.ca.gov/hq/bep/find\\_certified.htm](http://www.dot.ca.gov/hq/bep/find_certified.htm).

concentrated in certain work areas as to unduly burden non-DBEs working in those areas. Such measures may include, but are not limited to:

- Developing ways to assist DBEs to move into nontraditional areas of work;
- Varying the use of DBE contract goals; and
- Working with contractors to find and use DBEs in other industry areas.

Caltrans' policy states that if overconcentration occurs, the department will obtain approval from USDOT to develop appropriate measures to address it. Once approved, the measures will then become part of Caltrans' implementation of the Federal DBE program.

BBC investigated potential overconcentration on Caltrans contracts. There were three specific subindustries in which certified DBEs accounted for 50 percent or more of total subcontract dollars for contracts awarded between January 1, 2011 and December 31, 2015, based on contract data that the study team received from Caltrans:

- Trucking (74%);
- Other construction supplies (51%); and
- Flagging services (59%).

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. In addition, the above figures are based on both FHWA- and state-funded contracts and would likely differ if limited to FHWA-funded contracts. Caltrans should consider reviewing similar information and continuing to monitor the above types of work for potential overconcentration in the future.

**Business development programs – 49 CFR Part 26.35 and mentor-protégé 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. Caltrans offers the “Calmentor” program for small architecture & engineering businesses and the “Mentor-Protégé” program for small construction businesses. There are currently five Calmentor programs, each administered by individual districts or a cluster of districts. There is currently only one fully functioning Mentor-Protégé program. These programs provide DBEs with the opportunity to participate in a mentor-protégé-type relationship with larger, more successful businesses working in similar industries. To be eligible for the Calmentor program, a firm must be certified as a Small Business Enterprise, a DBE, or a Disabled Veteran Business Enterprise; or, it must demonstrate that it could qualify to be certified as a Small Business under the State of California process. Mentor-protégé relationships typically last one to two years.

Some of the business owners interviewed in the disparity study indicated that they had participated in the program and that it was helpful. Some business owners did not find the program helpful because the program did not provide enough technical guidance and is not

available statewide. Further expansion and improvement of the mentor-protégé programs appear to be warranted from the qualitative information collected in the disparity study.

In addition, Caltrans relies heavily on individual districts to implement BDPs and technical assistance on an ad-hoc basis. Caltrans might explore additional local partnerships to implement other BDPs technical assistance programs in a more consistent manner throughout the state. Such programs would provide specialized assistance that would be tailored to the needs of developing businesses.

**Responsibilities for monitoring the performance of program participants – 49 CFR**

**Part 26.37 and 49 CFR Part 26.55.** The Final Rule effective February 28, 2011, revised requirements for monitoring the work that prime contractors commit to DBE subcontractors at contract award (or through contract modifications) and enforcing that those DBEs actually perform that work. 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. In addition, 49 CFR Part 26.55 requires agencies to only count the participation of DBEs who are performing a commercially useful function (CUF) on contracts toward meeting DBE contract goals and overall DBE goals. To monitor and enforce CUF requirements, Caltrans resident engineers and inspectors conduct work and document reviews related to work completed by DBEs. Caltrans reviews:

- DBE participation both at time of contract commitment and at the end of each project;
- DBE subcontract payment tracking through its monthly subcontract payment tracking system, including supplier and trucking invoices; and
- Commitments and attainment information in its Uniform Report of DBE Commitments/Awards and Payments to the FHWA.

Caltrans should consider reviewing the requirements set forth in 49 CFR Part 26.37(b), 49 CFR Part 26.55, and in The Final Rule to ensure that its monitoring and enforcement mechanisms are appropriately implemented and consistent with federal regulations and best practices.

**Fostering small business participation – 49 CFR Part 26.39.** When implementing the Federal DBE Program, Caltrans must include measures 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.”<sup>3</sup> The Final Rule effective February 28, 2011 added a requirement for agencies to foster small business participation in their contracting. It required agencies to submit a plan for fostering small business participation to USDOT in early 2012. 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);

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<sup>3</sup> 49 CFR Part 26.39(a).

- 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
- Unbundling large contracts to allow small businesses more opportunities to bid for smaller contracts.

In order to facilitate small business participation, Caltrans implements a number of efforts including:

- Working with small businesses to help them better understand contracting and procurement opportunities with the department;
- Encouraging prime contractors and individual departments to use small businesses on contracts;
- Encouraging small businesses, including many minority- and woman-owned businesses, to pursue relevant certifications;
- Hosting and participating in procurement fairs, business development meetings, and other events that are intended to enhance contracting opportunities for small businesses;
- Providing one-on-one consultations with DBEs to assist them in learning how to do business with Caltrans and address small business issues; and
- Creating the Small Business Council (SBC) in order to promote the effective implementation of federal and state requirements and assist with issues relating to small business participation on Caltrans contracts.

Many efforts to encourage the participation of small businesses are currently carried out through individual districts on an ad-hoc basis. Caltrans might explore additional partnerships to implement other small business support services and programs in a more consistent manner throughout the state. Chapter 9 of the report outlines many of Caltrans' current race- and gender-neutral measures and provides examples of measures that other organizations in California have implemented. Caltrans should review this information and consider implementing measures that the department deems to be effective. Caltrans should also review legal and budgetary issues in considering different measures.

**Prohibition of DBE quotas and set-asides for DBEs unless in limited and extreme circumstances – 49 CFR Part 26.43.** DBE quotas are prohibited under the Federal DBE Program, and DBE set-asides can only 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. The State of California operates a program that limits bidding on certain contracts to certified small business enterprises. Caltrans does not use quotas in its implementation of the Federal DBE Program.

**Setting overall 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 DBE goals. As discussed in Chapter 1, departments such as Caltrans now need to develop and submit overall DBE goals every three years. Chapter 8 uses data and

results from the disparity study to provide Caltrans 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 goal for that year:

- Analyze the reasons for the difference in detail; and
- Establish specific steps and milestones to address the difference and enable the agency to meet the goal in the next fiscal year.

Based on information about awards and commitments to DBE-certified businesses, Caltrans has not met its DBE goal in recent years. In federal fiscal years 2011 through 2016, DBE awards and commitments that Caltrans made on FHWA-funded contracts was below its overall DBE goal by an average of 2.8 percentage points.

**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 the disparity study includes DBEs that are currently certified and minority- and woman-owned businesses that could *potentially* be DBE-certified based on revenue standards (i.e., potential DBEs).<sup>4</sup> Agencies can 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 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 this possibility, Caltrans 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 in FHWA-funded contracts;
- Developing internal reports for the participation of all minority- and woman-owned businesses (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) in FHWA-funded contracts; and
- Continuing to track participation of certified DBEs on FHWA-funded contracts per USDOT reporting requirements.

**Other steps to evaluate how Caltrans might better meet its overall DBE goal.** Analyzing the participation of potential DBEs is one step among many that Caltrans might consider taking when examining any differences between DBE participation and its overall DBE goal. Based on a comprehensive review, Caltrans must establish specific steps and milestones to correct the

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<sup>4</sup> Note that minority- and woman-owned businesses that could be DBE-certified but are not currently certified are counted as part of calculating the overall DBE goal. However, the participation of those businesses is not counted as part of Caltrans' DBE participation reports.

problems it identifies in its analysis and to enable it to better meet its overall DBE goal in the future.<sup>5</sup>

**Maximum feasible portion of goal met through neutral program measures – 49 CFR**

**Part 26.51(a).** As discussed in Chapter 9, Caltrans must meet the maximum feasible portion of its overall DBE goal through the use of race- and gender-neutral program measures. Caltrans must project the portion of its overall DBE goal that could be achieved through such measures. Caltrans should consider the information and analytical approaches presented in Chapter 9 when making such projections.

**Use of DBE contract goals – 49 CFR Part 26.51(d).** The Federal DBE Program requires agencies to use race- and gender-conscious measures—such as DBE contract goals—to meet any portion of their overall DBE goals that they do not project being able to meet using race- and gender-neutral measures. Based on information from the disparity study and other available information, Caltrans should assess whether the continued use of DBE contract goals is necessary in the future to meet any portion of its overall DBE goal. USDOT guidelines on the use of DBE contract goals, which are presented in 49 CFR Part 26.51(e), include the following guidance:

- DBE contract goals may only be used on contracts that have subcontracting possibilities;
- Agencies are not required to set DBE contract goals on every FHWA-funded contract;
- During the period covered by the overall DBE goal, an agency must set DBE contract goals so that they will cumulatively result in meeting the portion of the overall DBE goal that the agency projects being unable to meet through race- and gender-neutral measures;
- An agency's DBE contract goals must provide for participation by all DBE groups eligible to participate in race- and gender-conscious measures and must not be subdivided into group-specific goals; and
- An agency must maintain and report data on DBE participation separately for contracts that include and do not include DBE contract goals.

If Caltrans determines that it needs to continue using DBE contract goals on FHWA-funded projects, it should also evaluate which DBE groups should be considered eligible for those goals. If Caltrans decides to consider only certain DBE groups (e.g., groups that Caltrans determines to be *underutilized* DBEs) as eligible to participate in DBE contract goals, it must submit a waiver request to FHWA.

Some individuals participating in in-depth interviews and public meetings made comments related to the use of race- and gender-conscious measures such as DBE contract goals:

- Several minority- and woman-owned businesses commented that race- and gender-conscious measures help open many doors “that are normally shut.” Some minority- and woman-owned businesses indicated that the use of such measures has helped small minority- and woman-owned businesses get contracts they would not have otherwise.

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<sup>5</sup> 49 CFR Part 26.47(c)(2).

- Some interviewees supported the use of DBE contract goals but suggested that race- and gender-conscious measures should be limited in scope and closely monitored to ensure that such measures are appropriately enforced.

Caltrans should consider those comments if it determines that it is appropriate to use DBE contract goals on FHWA-funded contracts in the future.

#### **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 Caltrans determines that DBE participation exceeds its overall DBE goal for a fiscal year, it must reduce its use of DBE contract goals to the extent necessary. If it determines that it will fall short of the overall DBE goal in a fiscal year, it must make appropriate modifications in the use of race- and gender-neutral and race- and gender-conscious measures to allow it to meet its overall DBE goal in the following year. If Caltrans observes increased DBE participation (relative to availability), on contracts to which race- and gender-conscious measures do not apply, the department might consider changing its projection of how much of its overall DBE goal it can achieve through the use of race- and gender-neutral measures in the future.

**Good faith efforts 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. Caltrans' 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. Caltrans should review 49 CFR Part 26.53 and The Final Rule to ensure that its good faith efforts procedures are consistent with federal regulations.

Caltrans requires contractors to submit good faith efforts documentation and written confirmation in the event that bidders' efforts to include sufficient DBE participation were unsuccessful. In deciding whether to accept good faith efforts, Caltrans should consider the quality, quantity, and intensity of the different kinds of efforts that bidders made. The efforts should be those that one could reasonably expect a bidder to take if the bidder were actively and aggressively trying to obtain DBE participation sufficient to meet a contract goal. Perfunctory efforts should not be considered good faith efforts. However, determining the sufficiency of bidders' good faith efforts is at the department's discretion, and using quantitative formulas is not required.

Several individuals participating in in-depth interviews made comments related to good faith efforts. In general, many minority- and woman-owned businesses indicated that prime contractors often fail to make genuine efforts to use minority- and woman-owned businesses.

- Some participants indicated that good faith efforts procedures are not meaningfully enforced, or that requirements appear to vary across regions throughout the state
- Several minority- and woman-owned businesses indicated that the current race- and gender-conscious measures do not have incentives for prime contractors to make anything more than perfunctory good faith efforts in order to comply with the program. Prime

contractors are not incentivized to seek meaningful participation of minority- and woman-owned businesses on projects.

Caltrans 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.

**Counting DBE and MBE/WBE participation – 49 CFR Part 26.55.** 49 CFR Part 26.55 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, Caltrans should consider developing procedures and databases to consistently track participation of minority- and woman-owned businesses and potential DBEs in the contracts that the department awards. Such measures will help the department track the effectiveness of its efforts to encourage DBE participation. If applicable, Caltrans should also consider collecting important information regarding any shortfalls in annual DBE participation, including preparing participation reports for all minority- and woman-owned businesses (not just those that are DBE-certified). Caltrans should consider collecting and using the following information:

- Databases that BBC developed as part of the disparity study;
- Contractor/consultant registration documents from businesses working with Caltrans as prime contractors or subcontractors including information about the race/ethnicity and gender of their owners;
- Prime contractor and subcontractor participation on department contracts;
- Reports on the participation of certified DBEs in FHWA-funded contracts as required by the Federal DBE Program;
- Subcontractor participation data (for all tiers and suppliers) for all businesses regardless of race/ethnicity, gender, or certification status;
- Invoices for prime contractors and subcontractors;
- Descriptions of the areas of contracts on which subcontractors worked; and
- Subcontractors' contact information and committed dollar amounts from prime contractors at the time of contract award.

Caltrans should consider maintaining the above information for some minimum amount of time (e.g., five years). Caltrans 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.

**DBE certification – 49 CFR Part 26 Subpart D.** Caltrans is a certifying member of the California Unified Certification Program (CUCP) which maintains all of the DBE certification records for the State of California. Businesses interested in working with Caltrans that are seeking DBE certification must obtain it through Caltrans or another certifying member of the CUCP. The CUCP is designed to comply with 49 CFR Part 26 Subpart D. As Caltrans continues to



work with DBE-certified businesses, the department should consider ensuring that the CUCP continues to certify all groups that the Federal DBE Program presumes to be socially and economically disadvantaged in a manner that is consistent with federal regulations.

Many business owners and managers participating in in-depth interviews commented on the DBE certification process. Some business owners felt that the certification process was reasonable and relatively easy. However, other business owners were highly critical about the certification process. A number of business owners reported that the process was difficult to understand, very time consuming, and required excessive paperwork. Appendix D provides other perceptions of business owners who have considered DBE certification or who have gone through the certification process. Caltrans appears to follow federal regulations concerning DBE certification, which requires collecting and reviewing considerable information from program applicants. However, the department might research other ways to make the certification process easier for potential DBEs.

**Monitoring changes to the Federal DBE Program.** Federal regulations related to the Federal DBE Program change periodically, such as with the DBE Program Implementation Modifications Final Rule issued on October 2, 2014 and the Final Rule issued on February 28, 2011. Caltrans should continue to monitor such developments and ensure that the department's implementation of the Federal DBE Program is in compliance. Other transportation agencies' implementations of the Federal DBE Program are under review in federal district courts. Caltrans should also continue to monitor court decisions in those and other relevant cases (for details see Appendix B).

## **B. Additional Considerations**

Based on disparity study results and the study team's review of Caltrans' contracting practices and program measures, BBC provides additional considerations that the department should make as it works to refine its implementation of the Federal DBE Program. In making the following considerations, Caltrans should also assess additional resources that may be required as well as any required changes in state law or internal policy.

**Networking and outreach.** Caltrans hosts and participates in many networking and outreach events that include information about contracting requirements, the DBE certification process, doing business with the department, and available bid opportunities. Many business owners and managers participating in in-depth interviews indicated that they have attended such events and found them to be useful. However, other business owners commented that Caltrans meetings and outreach events do not provide valuable information or are scheduled during inconvenient times. Caltrans should consider continuing those efforts but might also consider broadening its efforts to include more partnerships with local trade organizations and other public agencies such as the California Black Chamber of Commerce; the Hispanic Chamber of Commerce; and various cities, townships, and higher education institutions. Caltrans might also consider initiating a consortium of local organizations and public agencies that would jointly host quarterly networking and outreach events and training sessions for businesses seeking public sector contracts. When scheduling networking and outreach events, Caltrans should consider time of day and location to improve convenience related to attending such events.

**Technical support services and programs.** Caltrans relies heavily on its district offices to provide technical assistance to small businesses, including many minority- and woman-owned businesses. Those services are provided on an ad-hoc basis depending on the individual needs of those businesses. In addition, some business owners and managers participating in the in-depth interviews indicated that technical assistance they have received through Caltrans has been “remedial” in nature. Caltrans is currently working to build partnerships with local organizations in order to more effectively deliver technical support services to local businesses. Caltrans should consider partnering with Small Business Development Centers, colleges, and universities throughout the state to deliver more consistent and appropriate technical support services and programs. Caltrans should also work to provide district offices more information on technical assistance services that may be relevant to their local communities.

OBEA manages Caltrans’ DBE supportive services efforts. Business owners and representatives on the Small Business Council underscored the importance of supportive services and encouraged Caltrans to appropriately fund these efforts and ensure that the services offered are relevant to small businesses.

**Contract and subcontract data.** Caltrans maintains comprehensive data on contract award amounts for first-tier subcontracts over a certain size. Caltrans also collects information about awards and payments to DBEs for both construction and professional services projects through monthly invoices. Caltrans could consider augmenting the subcontract data that it maintains by collecting award and payment information on all subcontracts regardless of contract size, contract tier, or whether the subcontractor was a supplier or trucker. Caltrans could consider requiring prime contractors to submit subcontractor payment data as part of the invoicing process and as a condition of receiving payment. Collecting subcontractor payment information will help ensure that Caltrans monitors the participation of minority- and woman-owned businesses, regardless of certification, as accurately as possible. In addition, Caltrans should consider collecting contract and subcontract information for FHWA-funded contracts that subrecipient local agencies award. Finally, Caltrans could consider storing all contract and subcontract data in a database to assist with reporting and analysis of DBE participation.

**Unbundling large contracts.** In general, minority- and woman-owned businesses exhibited reduced availability for relatively large contracts that Caltrans awarded during the study period. In addition, as part of in-depth interviews, several minority- and woman-owned businesses reported that the size of government contracts often serves as a barrier to their success (for details, see Appendix D). To further encourage the participation of small businesses—including many minority- and woman-owned businesses—Caltrans should consider making efforts to unbundle relatively large contracts into several smaller contracts. Doing so would result in that work being more accessible to small businesses, which in turn might increase competition from minority- and woman-owned businesses and result in greater minority- and woman-owned business participation.

**Prime contract opportunities.** Overall, disparity analysis results indicated substantial disparities for various racial/ethnic groups on the prime contracts that Caltrans (and various racial/ethnic and gender groups on federally-funded contracts) awarded during the study period. Caltrans might consider setting aside small prime contracts for small business bidding to encourage the participation of minority- and woman-owned businesses as prime contractors.

**Prompt payment policies.** The California Prompt Payment Act requires state departments to pay prime contractors within 45 days of departments receiving invoices. As part of in-depth interviews, several businesses—including many minority- and woman-owned businesses—reported difficulties with receiving payment in a timely manner on government contracts, particularly when they work as subcontractors (for details, see Appendix D). In light of such comments, Caltrans should consider reinforcing its prompt payment policies with its procurement staff and encouraging prime contractors to pay subcontractors within a certain period of time (e.g., 10 days). Doing so might help ensure that both prime contractors and subcontractors receive payment in a timely manner.

# APPENDIX A.

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## Definition of Terms

# APPENDIX A.

## Definitions of Terms

Appendix A defines terms that are useful to understanding the 2016 California Department of Transportation Disparity Study report. The following definitions are only relevant in the context of this report.

### **Anecdotal Information**

Anecdotal information includes personal qualitative accounts and perceptions of specific incidents—including any incidents of discrimination—told from individual interviewees' or participants' perspectives.

### **Availability Analysis**

An availability analysis assesses the percentage of dollars that one might expect a specific group of businesses to receive on contracts that a particular agency awards. The availability analysis in this report is based on various characteristics of potentially available businesses and of contract elements that the California Department of Transportation awarded during the study period.

### **Business**

A business is a for-profit company including all of its establishments or locations.

### **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 that the listing actually represents a business establishment with a working phone number.

### **Business Establishment**

A business establishment is a place of business with an address and a working phone number. A single business, or firm, can have many business establishments, or locations.

### **California Department of Transportation (Caltrans)**

Caltrans is responsible for managing more than 50,000 miles of California's federal and state highways. As a United States Department of Transportation fund recipient, Caltrans implements the Federal Disadvantaged Business Enterprise Program. Caltrans is one of the California Unified Certification Program (CUCP) certifying agencies in California, along with 10 other certifying agencies. Caltrans certifies statewide and the other certifying agencies certify geographically based on their region.

### **Commodities**

Commodities are supplies used by Caltrans or local agencies.

## **Consultant**

A consultant is a business performing a professional services contract.

## **Contract**

A contract is a legally binding relationship between the seller of goods or services and a buyer. The study team often treats the term “contract” synonymously with “procurement.”

## **Contract Element**

A contract element is either a prime contract or a subcontract.

## **Contractor**

A contractor is a business performing a construction contract.

## **Control**

Control means exercising management and executive authority of a business.

## **Disadvantaged Business Enterprise (DBE)**

A DBE is a business that is owned and controlled by one or more individuals who are socially and economically disadvantaged according to the guidelines in 49 Code of Federal Regulations (CFR) Part 26 which pertains to the Federal DBE Program. DBEs must be certified as such through one of the CUCP certifying agencies in California. The following groups are presumed to be socially and economically disadvantaged according to the Federal DBE Program:

- Asian Pacific Americans;
- Black Americans;
- Hispanic Americans;
- Native Americans;
- Subcontinent Asian Americans; and
- Women of any race or ethnicity.

A determination of economic disadvantage also includes assessing business’ gross revenues (maximum revenue limits ranging from \$7million to \$23.98 million depending on subindustry) and business owners’ personal net worth (maximum of \$1.32 million excluding equity in their homes and businesses). Some minority- and woman-owned businesses do not qualify as DBEs because of gross revenue or net worth requirements. Businesses owned by non-Hispanic white men can also be certified as DBEs if those businesses meet the requirements in 49 CFR Part 26 Appendix E.

## **Disparity**

A disparity is a difference or gap between an actual outcome and some benchmark. In this report, the term “disparity” refers to a difference between the participation, or utilization, of a specific group of businesses in Caltrans contracting and the availability of those businesses for that work.

## **Disparity Analysis**

A disparity analysis examines whether there are any differences between the participation, or utilization, of a specific group of businesses in Caltrans contracting and the availability of those businesses for that work.

## **Disparity Index**

A disparity index is computed by dividing the actual participation, or utilization, of a specific group of businesses in Caltrans contracting by the availability of those businesses for that work and multiplying the result by 100. 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 for specific industries within specific geographical areas (for details, see [www.dnb.com](http://www.dnb.com)).

## **Enterprise**

An enterprise is an economic unit that could be a for-profit business or business establishment; a nonprofit organization; or a public sector organization.

## **Federal DBE Program**

The Federal DBE Program was established by the United States Department of Transportation after enactment of the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) as amended in 1998. Regulations for the Federal DBE Program are set forth in 49 CFR Part 26. It is designed to increase the participation of minority- and woman-owned businesses in United States Department of Transportation-funded contracts.

## **Federally funded Contract**

A federally funded contract is any contract or project funded in whole or in part with United States Department of Transportation financial assistance. In this study, the study team uses the term “federally funded contract” synonymously with “USDOT-funded contract” or “FHWA-funded contract.”

## **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.

## **Firm**

See “business.”

## **Industry**

An industry is a broad classification for businesses providing related goods or services (e.g., *construction* or *professional services*).

## **Majority-owned Business**

A majority-owned business is a for-profit business that is owned and controlled by non-Hispanic white men.

## **Minority**

A minority is an individual who identifies with one of the racial/ethnic groups specified in the Federal DBE Program—Asian Pacific Americans, Black Americans, Hispanic Americans, Native Americans, or Subcontinent Asian Americans.

## **Minority-owned Business**

A minority-owned business is a business with at least 51 percent ownership and control by individuals who identify themselves with one of the racial/ethnic groups specified in the Federal DBE Program—Asian Pacific Americans, Black Americans, Hispanic Americans, Native Americans, or Subcontinent Asian Americans. A business does not have to be certified as a DBE to be considered a minority-owned business. The study team considers businesses owned by minority women as minority-owned businesses.

## **Non-DBE**

A non-DBE is a minority- or woman-owned business or a majority-owned business that is not certified as a DBE, regardless of the race/ethnicity or gender of the owner.

## **Non-response Bias**

Non-response bias occurs in survey research when participants’ responses to survey questions theoretically differ from the potential responses of individuals who did not participate in the survey.

## **Potential DBE**

A potential DBE is a minority- or woman-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 business that performed a professional services prime contract for an end user such as Caltrans.



## **Prime Contract**

A prime contract is a contract between a prime contractor, or prime consultant, and an end user such as Caltrans.

## **Prime Contractor**

A prime contractor is a construction business that performed a prime contract for an end user such as Caltrans.

## **Project**

A project refers to a construction or professional services endeavor that Caltrans or a subrecipient local agency awarded during the study period. A project could include one or more prime contracts and corresponding subcontracts.

## **Race- and Gender-conscious Measures**

Race- and gender-conscious measures are contracting measures that are specifically designed to increase the participation of minority- and woman-owned businesses. Businesses owned by members of certain racial/ethnic groups might be eligible for such measures whereas other might not. Similarly, businesses owned by women might be eligible but not businesses owned by men. The use of DBE contract goals is one example of a race- and gender-conscious measure.

## **Race- and Gender-neutral Measures**

Race- and gender-neutral measures are measures that are designed to remove potential barriers for all businesses attempting to do work with an agency or measures specifically designed to increase the participation of small or emerging 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-ups; and other methods open to all businesses, regardless of the race/ethnicity or gender of the owners.

## **Relevant Geographic Market Area**

The relevant geographic market area is the geographic area in which the businesses to which Caltrans 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 minority- and woman-owned business programs and disparity studies requires disparity study analyses to focus on the “relevant geographic market area.” The relevant geographic market area for Caltrans is the state of California.

## **Short Listing**

Short listing is a process that Caltrans uses to award professional services contracts in which it reduces the number of potential proposers to those proposers that are most qualified to participate in the contract. Caltrans may then request interviews with each short listed proposer.

## **State-funded Contract**

A state-funded contract is any contract or project that is wholly funded with non-federal funds. That is, the project does not include United States Department of Transportation or any other federal funds.

## **Statistically Significant Difference**

A statistically significant difference refers to a quantitative difference for which there is a 0.95 or 0.90 probability that chance can be correctly rejected as an explanation for the difference (meaning that there is a 0.05 or 0.10 probability, respectively, that chance in the sampling process could correctly account for the difference).

## **Subconsultant**

A subconsultant is a professional services business that performed services for a prime consultant as part of a larger professional services contract. For the purposes of the disparity study, analyses of subcontract utilization and availability include goods and services provided by subcontractors, subconsultants, and suppliers.

## **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. For the purposes of the disparity study, analyses of subcontract utilization and availability include goods and services provided by subcontractors, subconsultants, and suppliers.

## **Subcontractor**

A subcontractor is a business that performed services for a prime contractor as part of a larger contract.

## **Subindustry**

A subindustry is a specific classification for businesses providing related goods or services within a particular industry (e.g., *water, sewer, and utility lines* is a subindustry of *construction*).

## **Subrecipient local agency**

A subrecipient local agency is an agency or other entity that receives United States Department of Transportation funding from Caltrans for transportation-related construction or professional services projects. Subrecipient local agencies must implement the Federal DBE Program for contracts on which they use United States Department of Transportation funding.

## **Supplier**

A supplier is business that provides construction-related goods for a prime contractor or prime consultant as a part of a larger contract. For the purposes of the disparity study, analyses of subcontract utilization and availability include goods and services provided by subcontractors, subconsultants, and suppliers.

## United States Departments of Transportation (USDOT)

USDOT is a federal cabinet department of the United States government that oversees federal highway, air, railroad, maritime, and other transportation administration functions. FHWA is a USDOT agency.

## Utilization

Utilization refers to the percentage of total contracting dollars that were associated with a particular set of contracts that went to a specific group of businesses.

## Vendor

A vendor is a business that sells goods either to a prime contractor or prime consultant or to an end user such as Caltrans.

## Woman-owned Business

A woman-owned business is a business with at least 51 percent ownership and control by non-Hispanic white women. A business does not have to be certified as a DBE to be considered a woman-owned business. The study team considered businesses owned by minority women as minority-owned businesses.

BBC chose not to code businesses as both woman-owned and minority-owned to avoid double-counting certain businesses when reporting disparity study results. Creating groups of minority woman-owned businesses that were distinct from businesses owned by minority men (e.g., Black American woman-owned businesses versus businesses owned by Black American men) was also unworkable, because some minority groups exhibited such low participation that further disaggregation by gender would have made it difficult to interpret study results.

After rejecting the first two options, BBC then considered whether to group minority woman-owned businesses with all other woman-owned businesses or with their corresponding minority groups. BBC chose the latter (e.g., grouping Black American woman-owned businesses with all other Black American-owned businesses). Thus, *woman-owned businesses* in this report refers to non-Hispanic white woman-owned businesses.

# **APPENDIX B.**

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## **Legal Environment for Caltrans DBE Program**

# APPENDIX B.

## Legal Environment for Caltrans DBE Program

The following is a brief summary by Holland & Knight LLP of the legal environment relating to Caltrans' implementation of the Federal DBE Program.

### 1. The Federal DBE Program

The Federal Disadvantaged Business Enterprise ("DBE") Program ("Federal DBE Program") is implemented via regulations<sup>1</sup> promulgated by the United States Department of Transportation ("USDOT") as authorized by the Transportation Equity Act for the 21st Century (TEA-21) as amended and reauthorized ("MAP-21" and "SAFETEA" and "SAFETEA-LU").<sup>2</sup> Most recently, in December 2015, the Federal DBE Program was continued and reauthorized by the Fixing America's Surface Transportation Act (FAST Act).<sup>3</sup> This appendix briefly outlines the legal environment regarding the Federal DBE Program applicable to implementation of this Program in California. As a recipient of certain types of federal funds, the California Department of Transportation ("Caltrans") is required to comply with federal regulations (49 CFR Part 26) and implement the Federal DBE Program.

Caltrans is required to develop and submit for approval to the USDOT its DBE program, including an overall statewide goal for DBE participation on federally-funded contracts and a projection of what percentage of that overall goal it expects to meet through race- and gender-neutral means or, if necessary, race- and gender-conscious means, in accordance with the federal regulations.<sup>4</sup> The overall DBE goal, depending on the evidence available to Caltrans, will be achieved through the use of race- and gender-neutral means, and, where appropriate, through the use of race- and gender-conscious means, or a combination of these measures, by meeting the maximum feasible portion of the overall goal using race- and gender-neutral means.<sup>5</sup>

#### **Fixing America's Surface Transportation Act" or the "FAST Act" (December 4, 2015)**

On December 3, 2015, the Fixing America's Surface Transportation Act" or the "FAST Act" was passed by Congress, and it was signed by the President on December 4, 2015, as the new five year surface transportation authorization law.<sup>6</sup> The FAST Act continues the Federal DBE Program and makes the following "Findings" in Section 1101 (b) of the Act:

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<sup>1</sup> These regulations are found at 49 CFR Part 26 (Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs ("Federal DBE Program").

<sup>2</sup> 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.

<sup>3</sup> Pub. L. 114-94, H.R. 22, § 1101(b), December 4, 2015, 129 Stat. 1312.

<sup>4</sup> 49 CFR Section 26.45.

<sup>5</sup> 49 CFR Sections 26.45, 26.51.

<sup>6</sup> Pub. L. 114-94, H.R. 22, § 1101(b), December 4, 2015, 129 Stat. 1312.

## **SEC. 1101. AUTHORIZATION OF APPROPRIATIONS.**

(b) Disadvantaged Business Enterprises-

(1) FINDINGS- Congress finds that—

(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.<sup>7</sup>

Therefore, Congress in the FAST Act, passed on December 3, 2015, has again found based on testimony, evidence and documentation updated since MAP-21 was adopted in 2012 as follows: (1) 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; (2) the continuing barriers described in § 1101(b), subparagraph (A) above merit the continuation of the disadvantaged business enterprise program; and (3) 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.<sup>8</sup>

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<sup>7</sup> *Id.*

<sup>8</sup> *Id.*

## 2. MAP-21 (July 2012)

In the 2012 Moving Ahead for Progress in the 21st Century Act (MAP-21), Congress also provided "Findings" that "discrimination and related barriers" "merited the continuation of the" Federal DBE Program.<sup>9</sup> Congress in MAP-21 determined that there was "a compelling need for the continuation of the Federal DBE Program" based on testimony and documentation of race and gender discrimination and barriers to full and fair participation in surface transportation related businesses in the public and private markets.<sup>10</sup>

## 3. US DOT Final Rule (2011)

In a Final Rule amending the Federal DBE Program effective February 28, 2011,<sup>11</sup> the USDOT stated there is a continuing compelling need for the DBE program.<sup>12</sup> The USDOT concluded that, as court decisions have noted, the USDOT's DBE regulations and the statutes authorizing them "are supported by a compelling need to address discrimination and its effects."<sup>13</sup> The USDOT stated the "basis for the program has been established by Congress and applies on a nationwide basis...", and noted that both the House and Senate FAA Reauthorization Bills contained findings reaffirming the compelling need for the program.

## 4. Implementing the Federal DBE Program

In implementing its Federal DBE Program, Caltrans is responsible for serious, good faith consideration of workable race-, ethnic-, and gender-neutral means, including those identified in 49 CFR Section 26.51(b), that can be implemented.<sup>14</sup> The USDOT has advised that recipients should take affirmative steps to use as many race-neutral means of achieving DBE participation identified at 49 CFR Section 26.51(b) as possible.<sup>15</sup>

The Ninth Circuit Court of Appeals in *Associated General Contractors of America, San Diego Chapter, Inc. v. Cal. DOT* ("AGC, San Diego v. Caltrans") and *Western States Paving Co. v. Washington State DOT* found that "the regulations require a state to 'meet the maximum feasible

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<sup>9</sup> Pub L. 112-141, H.R. 4348, § 1101(b), July 6, 2012, 126 Stat 405.

<sup>10</sup> *Id.*

<sup>11</sup> 76 Fed. Reg. 5083 (January 28, 2011) amending the Federal DBE Program at 49 C.F.R. Part 26.

<sup>12</sup> 76 F.R. at 5095.

<sup>13</sup> 76 F.R. at 5095.

<sup>14</sup> *Associated General Contractors of America, San Diego Chapter, Inc. v. California DOT*, 713 F.3d 1187, 1199 (9th Cir. 2013) (AGC, San Diego v. Caltrans)); *Western States Paving Company v. Washington State Department of Transportation*, 407 F.3d 983, 993 (9th Cir. 2005), *cert. denied*, 546 U.S. 1170 (2006) (citing 49 CFR Section 26.51(a)); *See, e.g., Sherbrooke Turf Inc. v. Minnesota DOT*, 345 F.3d 964 at 972 (8th Cir. 2003), *cert. denied*, 541 U.S. 1041 (2004); *Adarand Constructors, Inc. v. Slater* (Adarand VII), 228 F.3d 1147 at 1179 (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); *Associated General Contractor 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 dismissed based on standing, on other grounds Ninth Circuit held Caltrans' DBE Program constitutional. Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation, et al.*, 713 F.3d 1187 (9th Cir. April 16, 2013).

<sup>15</sup> Questions and Answers Concerning Response to *Western States Paving Company v. Washington State Department of Transportation* [hereinafter DOT Guidance], available at [http://www.fhwa.dot.gov/civilrights/dbe\\_memo\\_a5.htm](http://www.fhwa.dot.gov/civilrights/dbe_memo_a5.htm). *See* 49 CFR Section 26.9 (January 2006); *See, e.g., Northern Contracting*, 473 F.3d at 723 – 724; *Western States Paving*, 407 F.3d at 993 (citing 49 CFR § 26.51(a)).

portion of [its] overall goal by using race-neutral means.”<sup>16</sup> The courts have held that while a state is not required to exhaust every possible race-, ethnicity-, and gender-neutral alternative, it does “require serious, good faith consideration of workable race-neutral alternatives.”<sup>17</sup> In formulating its implementation of the Federal DBE Program, Caltrans must assess how much of the annual DBE goal can be met through neutral means and what percentage, if any, should be met through race- and gender-conscious means.

**Strict scrutiny.** Race- or gender-conscious measures are not appropriate unless they are to remedy identified discrimination or its effects in the state transportation contracting industry.<sup>18</sup> If Caltrans implements race- and gender-conscious measures, it is subject to the “strict scrutiny” analysis as applied by the courts.<sup>19</sup> The first prong of the strict scrutiny analysis requires a governmental entity to have a “compelling governmental interest” in remedying past identified discrimination.<sup>20</sup> The Ninth Circuit and other federal courts have held that, with respect to the Federal DBE Program, state departments of transportation (“DOTs”) do not need to independently satisfy this prong because Congress has satisfied the compelling governmental interest test of the strict scrutiny analysis.<sup>21</sup> The second prong of the strict scrutiny analysis requires that a state DOT’s implementation of the Federal DBE Program be “narrowly tailored” to remedy identified discrimination in a particular state’s transportation contracting and procurement market.<sup>22</sup>

**Narrow tailoring.** The narrow tailoring requirement has several components. According to the Ninth Circuit in *AGC, San Diego v. Caltrans* and *Western States Paving*, a state must have sufficient evidence of discrimination within the state’s own transportation contracting marketplace in

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<sup>16</sup> *AGC, San Diego v. Caltrans*, 713 F.3d 1187, 1199 (9<sup>th</sup> Cir. 2013); *Western States Paving*, 407 F.3d at 993; 49 CFR Section 26.51.

<sup>17</sup> *AGC, San Diego v. Caltrans*, 713 F.3d at 1199; *Western States Paving*, 407 F.3d at 993; See, e.g., *Sherbrooke Turf*, 345 F.3d at 972; *Adarand VII*, 228 F.3d at 1179; *Eng’g Contractors Ass’n of S. Florida v. Metro-Dade County*, 122 F.3d 895, at 927 (11<sup>th</sup> Cir. 1997); *Coral Constr. Co. v. King County*, 941 F.2d 910, at 923 (9<sup>th</sup> Cir. 1991).

<sup>18</sup> *AGC, San Diego v. Caltrans*, 713 F.3d at 1191, 1198; *Western States Paving*, 407 F.3d 983, 998-9; 49 CFR Part 26.

<sup>19</sup> See *City of Richmond v. J.A. Croson*, 488 U.S. 469 (1989); *Adarand Constructors, Inc. v. Peña*, 515 U.S. 200 (1995); *AGC, San Diego v. Caltrans*, 713 F.3d 1187, 1191; *Western States Paving*, 407 F.3d 983. The Ninth Circuit Court of Appeals and other courts have applied “intermediate scrutiny” to gender-conscious programs. The Ninth Circuit has interpreted this standard to require that gender-based classifications be: (1) Supported by both an exceedingly persuasive justification; and (2) Substantially related to the achievement of that underlying objective. See *AGC, San Diego v. Caltrans*, 713 F.3d at 1191-1195; *Western States Paving*, 407 F.3d at 990 n.6; *Coral Constr. Co. v. King County*, 941 F.2d 910, 931 (9<sup>th</sup> Cir. 1991); *Equal Found. v. City of Cincinnati*, 128 F.3d 289 (6<sup>th</sup> Cir. 1997).

<sup>20</sup> *Adarand I*, 515 U.S. 200, 227 (1995); *AGC, SDC v. Caltrans*, 713 F.3d 1187, 1195-1200 (9<sup>th</sup> Cir. 2013); *Northern Contracting*, 473 F.3d at 721; *Western States Paving*, 407 F.3d at 991 (9<sup>th</sup> Cir. 2005); *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 (6<sup>th</sup> Cir. 2000); *Eng’g Contractors Ass’n of South Florida, Inc. v. Metro. Dade County*, 122 F.3d 895 (11<sup>th</sup> Cir. 1997); *Contractors Ass’n of E. Pa. v. City of Philadelphia (“CAEP I”)*, 6 F.3d 990 (3<sup>d</sup> Cir. 1993).

<sup>21</sup> *AGC, San Diego v. Caltrans*, 713 F.3d at 1191-1193; *Northern Contracting, Inc. v. Illinois DOT*, 473 F.3d 715, 721 (7<sup>th</sup> Cir. 2007), *reh’g and reh’g en banc denied* (7<sup>th</sup> Cir. 2007); *Western States Paving*, 407 F.3d at 991; *Sherbrooke Turf, Inc. v. Minnesota DOT and Gross Seed Co. v. Nebraska Dep’t of Road*, 345 F.3d 964, 969 (8<sup>th</sup> Cir. 2003); *Adarand Constructors, Inc. v. Slater (Adarand VII)*, 228 F.3d 1147, 1176 (10<sup>th</sup> Cir. 2000) ; See *Midwest Fence*, 84 F. Supp. 3d 705, 2015 WL 1396376, *appeal pending*; *Mountain West Holding*, 2014 WL 666734, *appeal pending*.

<sup>22</sup> *AGC, San Diego v. Caltrans*, 713 F.3d at 1191-1193, 1195-1200; *Western States Paving*, 407 F.3d at 995-998; *Sherbrooke Turf*, 345 F.3d at 970-71.



order to determine whether or not there is the need for race- or gender-conscious remedial action.<sup>23</sup> Thus, the Ninth Circuit ruled that mere compliance with federal regulations implementing the Federal DBE Program alone is not enough to satisfy strict scrutiny.<sup>24</sup> Second, the Court found that even where evidence of discrimination is present in a state, a narrowly tailored program should apply only to those minority groups who have actually suffered discrimination.<sup>25</sup> For a specific minority group to be included in any race-conscious measures in a state's implementation of the Federal DBE Program, there must be evidence that the group suffered discrimination or its effects within the local marketplace.<sup>26</sup>

Federal courts have held that additional factors may also be pertinent in determining whether a state DOT's implementation of the Federal DBE Program is narrowly tailored: flexibility and limited duration of race-conscious measures, including the availability of waiver provisions; the relationship of the numerical DBE goals to the relevant market; the effectiveness of alternative race- and gender-neutral remedies; and the impact of a race-conscious remedy on the rights of third parties.<sup>27</sup>

**Western States Paving Co. v. WSDOT (9th Cir. 2005).** 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."<sup>28</sup> Accordingly, the USDOT advised federal aid recipients that any use of race-conscious measures must be

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<sup>23</sup> *AGC, San Diego v. Caltrans*, 713 F.3d at 1191-1192, 1195-1196; *Western States Paving*, 407 F.3d at 997-98, 1002-03; see *Mountain West Holding Co., Inc. v. Montana*, 2014 WL 6686734 (D. Mont. 2014), appeal pending in the U.S. Court of Appeals for the Ninth Circuit; *M.K. Weeden v. Montana*, 2013 WL 4774517 at \*4 (D. Mont. 2013).

<sup>24</sup> *Western States Paving*, 407 F.3d at 995-1003. In the *Northern Contracting* decision (2007), the Seventh Circuit held "that a state is insulated from [a narrow tailoring] constitutional attack, absent a showing that the state exceeded its federal authority. IDOT 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." 473 F.3d at 722. The Seventh Circuit distinguished both the Ninth Circuit decision in *Western States Paving* and the Eighth Circuit decision in *Sherbrooke Turf*, relating to an as-applied narrow tailoring analysis. The court 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. Id. at 722. The court affirmed the district court upholding the validity of IDOT's DBE program. See, e.g., *Dunnet Bay Construction Co. v. Borggren, Illinois DOT, et al.*, 799 F.3d 676, 2015 WL 4934560 (7th Cir. August 19, 2015), Petition for a Writ of Certiorari to the U.S. Supreme Court, pending, Docket No. 15-906; *Dunnet Bay Construction Co. v. Illinois DOT, et al.* 2014 WL 552213 (C. D. Ill. 2014), affirmed by *Dunnet Bay*, 2015 WL 4934560 (7th Cir. August 19, 2015); *Midwest Fence Corp. v. U.S. DOT*, 2015 WL 1396376 (N.D. Ill. March 24, 2015), appeal pending in the U.S. Court of Appeals for the Seventh Circuit, Docket No. 15-1827; *Geod Corp. v. New Jersey Transit Corp., et al.*, 746 F.Supp.2d 642 (D.N.J. 2010); *South Florida Chapter of the Associated General Contractors v. Broward County, Florida*, 544 F.Supp.2d 1336 (S.D. Fla. 2008).

<sup>25</sup> *Western States Paving*, 407 F.3d at 995-1003; See, *AGC, San Diego v. Caltrans*, 713 F.3d at 1191, 1198-1199

<sup>26</sup> *AGC, San Diego v. Caltrans*, 713 F.3d at 1191, 1198-1199; *Western States Paving*, 407 F.3d at 996-1000; See, e.g., *Sherbrooke Turf*, 345 F.3d at 971; *Adarand VII*, 228 F.3d at 1181; *Mountain West Holding*, 2014 WL 6686734, appeal pending; *M.K. Weeden*, 2013 WL 4774517; *Kornhass Construction, Inc. v. State of Oklahoma, Department of Central Services*, 140 F.Supp.2d at 1247-1248 (W.D. OK. 2001).

<sup>27</sup> See, e.g., *AGC, SDC v. Caltrans*, 713 F.3d at 1198-1199; *Rothe Development Corp v. U.S. Department of Defense*, 545 F.3d 1023, at 1036 (Fed. Cir. 2008); *Western State Paving*, 407 F.3d at 993-995; *Sherbrooke Turf*, 345 F.3d at 971; *Adarand VII*, 228 F.3d at 1181.

<sup>28</sup> *Western States Paving*, 407 F.3d at 996; see also Br. for the United States, at 28 (April 19, 2004).

predicated on evidence that the recipient has concerning discrimination or its effects within the local transportation contracting marketplace.<sup>29</sup>

Following *Western States Paving*, the USDOT recommended the use of disparity studies by state DOTs to examine whether or not there is evidence of discrimination or its effects, and how remedies might be narrowly tailored in developing their DBE Program to comply with the Federal DBE Program and its implementation by state DOTs and recipients of Federal Funds from the U.S. DOT.<sup>30</sup> The USDOT suggests consideration of both statistical and anecdotal evidence, and that evidence of discrimination and its effects should be examined separately for each group presumed to be disadvantaged in 49 CFR Part 26.<sup>31</sup>

Therefore, Caltrans in 2006-2007 conducted a disparity study and implemented its DBE Program in 2009 as approved by the Federal Highway Administration. Caltrans also engaged in a disparity study in 2012. Caltrans is now conducting a new 2016 disparity study to assist it in implementing the federal regulations and the Federal DBE Program, based on the most recent authority regarding the validity of the Federal DBE Program and its implementation by state DOTs and recipients of federal funds.<sup>32</sup>

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<sup>29</sup> DOT Guidance, available at [http://www.fhwa.dot.gov/civilrights/dbe\\_memo\\_a5.htm](http://www.fhwa.dot.gov/civilrights/dbe_memo_a5.htm) (January 2006).

<sup>30</sup> *Id.*; see also 42 CFR Section 26.45.

<sup>31</sup> DOT Guidance, available at [http://www.fhwa.dot.gov/civilrights/dbe\\_memo\\_a5.htm](http://www.fhwa.dot.gov/civilrights/dbe_memo_a5.htm) (January 2006).

<sup>32</sup> *AGC, San Diego v. Caltrans*, 713 F.3d 1187 (9<sup>th</sup> Cir. 2013); See, e.g., *Dunnet Bay Construction Co. v. Borggren, Illinois DOT, et al.*, 799 F.3d 676, 2015 WL 4934560 (7<sup>th</sup> Cir. August 19, 2015), *Petition for a Writ of Certiorari to the U.S. Supreme Court, pending*, Docket No. 15-906; *Dunnet Bay Construction Co. v. Illinois DOT, et al.* 2014 WL 552213 (C. D. Ill. 2014), *affirmed by Dunnet Bay*, 2015 WL 4934560 (7<sup>th</sup> Cir. August 19, 2015); *Northern Contracting*, 473 F.3d 715; *Western States Paving*, 407 F.3d 983; *Sherbrooke Turf*, 345 F.3d 964; *Adarand VII*, 228 F.3d 1147; *Midwest Fence Corp. v. U.S. DOT, Midwest Fence Corp. v. U.S. DOT*, 2015 WL 1396376 (N.D. Ill. March 24, 2015), *appeal pending* in the U.S. Court of Appeals for the Seventh Circuit, Docket No. 15-1827; *Mountain West Holding Co., Inc. v. Montana*, 2014 WL 6686734 (D. Mont. 2014), *appeal pending* in the U.S. Court of Appeals for the Ninth Circuit; *Geyer Signal, Inc., et al v. Minnesota Dep't of Transp., et al*, 2014 WL 1309092 (D. Minn. March 31, 2014), *appeal dismissed*, No. 14-2025 (June 24, 2014); *M.K. Weeden v. Montana*, 2013 WL 4774517 (D. Mont. 2013); *Geod Corp. v. New Jersey Transit Corp., et al.*, 746 F.Supp.2d 642 (D.N.J. 2010); *South Florida Chapter of AGC v. Broward County, Florida*, 544 F.Supp.2d 1336 (S.D. Fla. 2008). See also *H.B. Rowe Co., Inc. v. Tippet*, 615 F.3d 233 (4<sup>th</sup> Cir. 2010) (Court upheld North Carolina DOT MBE program on its face and as applied to Black and Native American subcontractors and struck down program as applied to WBEs and Asian and Hispanic American subcontractors); *Rothe Development, Inc. v. U.S. Department of Defense and Small Business Administration*, 107 F. Supp. 3d 183, 2015 WL 3536271 (D.D.C. June 5, 2015), *appeal pending* in the United States Court of Appeals, District of Columbia Circuit; *Rothe Development Corp. v. U.S. Department of Defense*, 545 F.3d 1023 (Fed. Cir. 2008) (Court held unconstitutional the Department of Defense social and economic disadvantaged businesses ("SDBs") program); *Dynalantic Corp. v. U.S. Department of Defense, et al.*, 885 F.Supp. 2d 23 (D. D.C. 2012). (Court upheld constitutionality of the SBA Section 8(a) Program on its face, but struck down the Program as applied to military simulation training industry).

**AGC, San Diego v Caltrans (9th Cir. 2013).**<sup>33</sup> In *Western States Paving*, the Ninth Circuit in 2005 upheld the validity of the Federal DBE Program, but the Court held invalid and unconstitutional WSDOT's DBE Program implementation of the Federal DBE Program<sup>34</sup>. The Court 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.<sup>35</sup>

Recently, the Ninth Circuit Court of Appeals and the United States District Court for the Eastern District of California in *Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation ("Caltrans"), et al. ("AGC, San Diego v. Caltrans")*, upheld the validity of California DOT's DBE Program implementing the Federal DBE Program, and held that Caltrans' implementation of the Federal DBE Program is constitutional.<sup>36</sup> The Ninth Circuit held that Caltrans' DBE Program implementing the Federal DBE Program complied with the ruling in *Western States Paving*, and was constitutional and survived strict scrutiny by: (1) having a strong basis in evidence of discrimination within the California transportation contracting industry based in substantial part on the evidence from the Disparity Study conducted for Caltrans; and (2) being "narrowly tailored" to benefit only those groups that have actually suffered discrimination.<sup>37</sup>

The District Court had 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.<sup>38</sup>

**Mountain West Holding v. Montana DOT and M.K. Weeden v. Montana DOT.** Two recent District Court decisions in the Ninth Circuit in Montana, *Mountain West Holding*<sup>39</sup> and *M.K. Weeden*<sup>40</sup> followed the AGC, *SDC v. Caltrans* Ninth Circuit decision, and held as valid and constitutional the Montana Department of Transportation's implementation of the Federal DBE

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<sup>33</sup> 713 F.3d 1187 (9th Cir. 2013).

<sup>34</sup> 407 F.3d 983 (2005).

<sup>35</sup> *Id.*

<sup>36</sup> *Associated General Contractors of America, San Diego Chapter, Inc. v. California DOT*, 713 F.3d 1187, 1195-1200 (9th Cir. 2013); *Associated General Contractor 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 dismissed based on standing, on other grounds Ninth Circuit held Caltrans' DBE Program constitutional. Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation, et al.*, 713 F.3d 1187 (9th Cir. 2013); see *M.K. Weeden v. Montana*, 2013 WL 4774517 at \*4 (D. Mont. 2013).

<sup>37</sup> *AGC, San Diego v. Caltrans*, 713 F.3d at 1195-1200.

<sup>38</sup> *Id.*, *Associated General Contractors of America, San Diego Chapter, Inc. v. California DOT*, Slip Opinion Transcript of U.S. District Court at 42-56.

<sup>39</sup> *Mountain West Holding*, 2014 WL 6686734, *appeal pending*.

<sup>40</sup> *M.K. Weeden*, 2013 WL 4774517.

Program. *The Mountain West Holding* decision, at the time of this report, has been appealed to the U.S. Court of Appeals for the Ninth Circuit.<sup>41</sup>

## 5. Pending Cases (at the time of this report)

There are pending cases in the federal courts at the time of this report involving challenges to the Federal DBE Program and its implementation by state DOTs that may potentially impact and be instructive to the study and Caltrans as a recipient of federal funding under the Federal DBE Program, including the following:

- ***Mountain West Holding Co., Inc. v. The State of Montana, Montana DOT, et al.*** 2014 WL 6686734 (D. Mont. Nov. 26, 2014) *appeal pending* in the U.S. Court of Appeals, Ninth Circuit, Docket Numbers 14-36097 and 15-35003.
- ***Dunnet Bay Construction Co. V. Borggren, Illinois DOT, et al.***, 799 F.3d 676, 2015 WL 4934560 (7th Cir. August 19, 2015). Dunnet Bay submitted a Petition for a Writ of Certiorari in January 2016 to the U.S. Supreme Court, which is pending. Docket No. 15-906.
- ***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.***, 84 F. Supp. 3d 705, 2015 WL 1396376 (N.D. Ill, March 24, 2015), *appeal pending* in the U.S. Court of Appeals, Seventh Circuit, Docket Number 15-1827.
- ***Rothe Development Inc. v. Department of Defense, et al.***, 107 F. Supp. 3d 183, 2015 WL 3536271 (D. D.C. June 5, 2015), *appeal pending* in the U.S. Court of Appeals, District of Columbia Circuit, Docket Number 15-5176.

Although not involving the Federal DBE Program, it is instructive for the study and Caltrans to note the 2015 recent decision in *Rothe Development*, which is on appeal to the District of Columbia Circuit Court of Appeals. Plaintiff Rothe Development, Inc. sued the U.S. Department of Defense (“DOD”) and the U.S. Small Business Administration (“SBA”) challenging the constitutionality of the Section 8(a) Program on its face. The court, applying the strict scrutiny analysis, concluded that plaintiff’s facial constitutional challenge to the Section 8(a) Program failed, the government demonstrated a compelling interest for the racial classification, the need for remedial action is supported by strong and un rebutted evidence, and the Section 8(a) program is narrowly tailored.

This list of pending cases is not exhaustive, but in addition to the cases cited previously may potentially have an impact on the study and Caltrans’ implementation of the Federal DBE Program.

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<sup>41</sup> *Mountain West Holding v. Montana*, 2014 WL 6686734 (D. Mont. 2014), *appeal pending* in the U.S. Court of Appeals for the Ninth Circuit, Docket Numbers 14-36097 and 15-35003.

# APPENDIX C.

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## Marketplace Analyses

## APPENDIX C.

### Marketplace Analyses

**Figure C-1.**  
**Percentage of all**  
**workers 25 and older**  
**with at least a four-year**  
**degree, California and**  
**the United States, 2010-**  
**2014**

Note:

\*\*, ++ Denotes statistically significant differences from non-Hispanic whites (for minority groups) or from men (for women) at the 95% confidence level for the United States as a whole and California, respectively.

Source:

BBC Research & Consulting from 2010-2014 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center:  
<http://usa.ipums.org/usa/>.

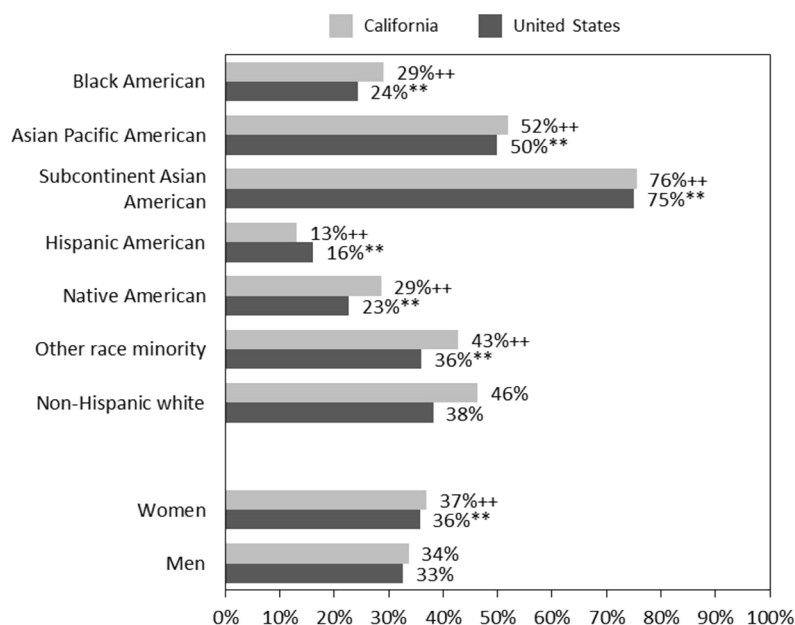
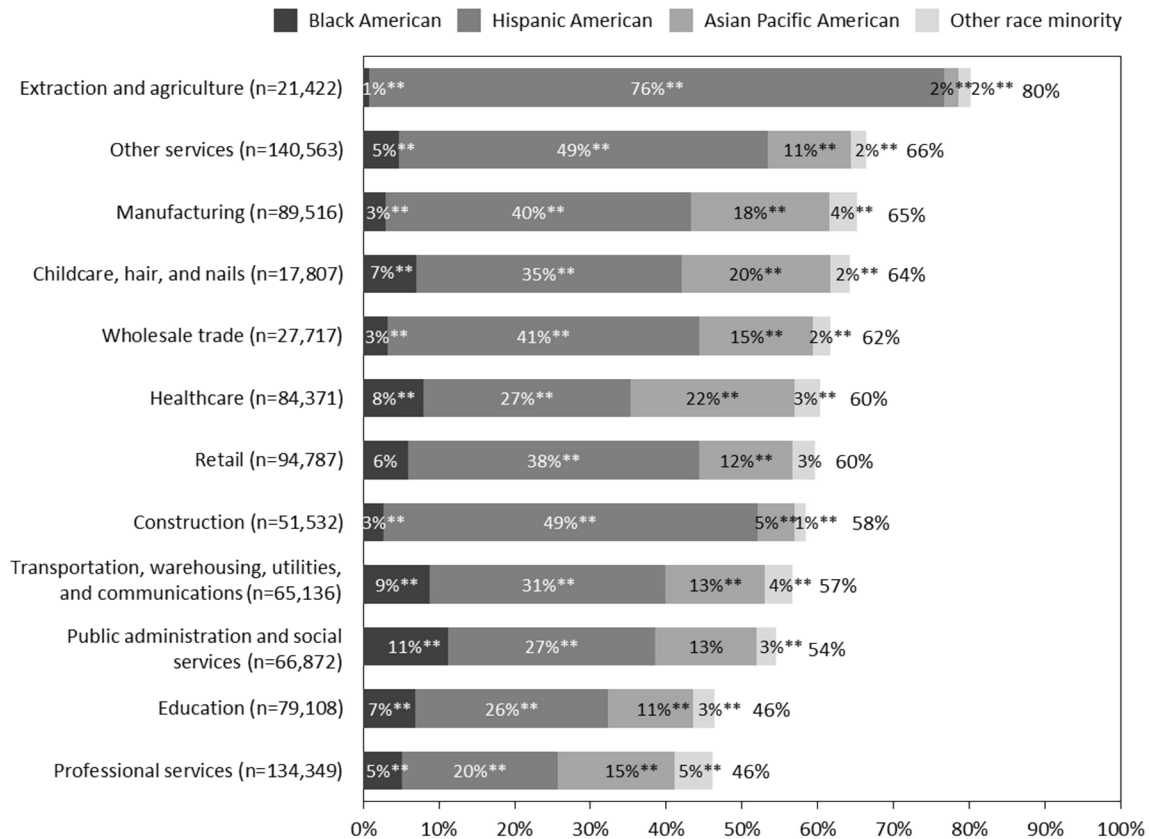


Figure C-1 indicates that, compared to Non-Hispanic white Americans working in California, significantly smaller percentages of Black Americans, Hispanic Americans, Native Americans, and other race minorities have four-year college degrees. In contrast, significantly larger percentages of Asian Pacific Americans and Subcontinent Asian Americans have four-year college degrees. In addition, a significantly larger percentage of women than men working in California have four-year college degrees.

**Figure C-2.**  
**Percent representation of minorities in various industries in California, 2010-2014**



Notes: \*\* Denotes that the difference in proportions between minority workers in the specified industry and minority workers in all industries is statistically significant at the 95% confidence level.

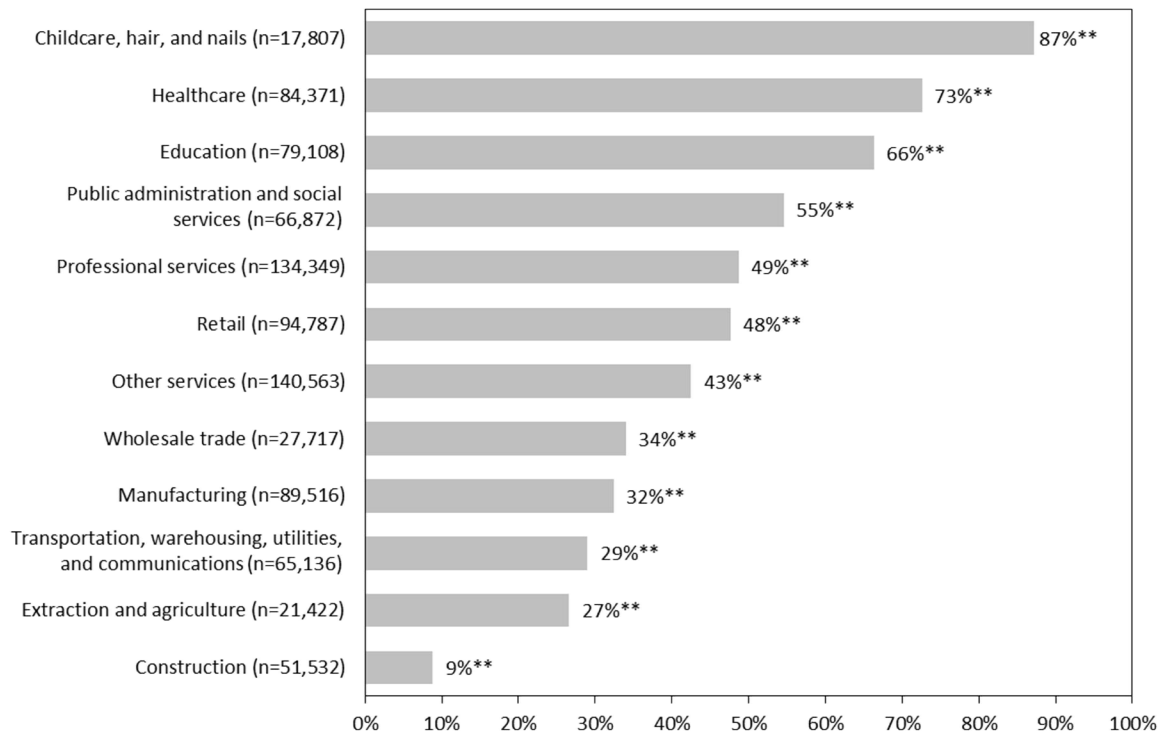
The representation of minorities among all California workers is 5.9% for Black Americans, 13.5% for Asian Pacific Americans, 36.1% for Hispanic Americans, 3% for other race minorities, and 58.6% for all minorities considered together.

Workers in the finance, insurance, real estate, legal services, accounting, advertising, architecture, management, scientific research, and veterinary services industries were combined to one category of professional services. Workers in the rental and leasing; travel; investigation; waste remediation; arts; entertainment; recreation; accommodations; food services; and select other services were combined into one category of other services. Workers in child day care services, barber shops, beauty salons, nail salons, and other personal services were combined into one category of childcare, hair, and nails.

Source: BBC Research & Consulting from 2010-2014 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>

Figure C-2 indicates that the California industries with the highest representations of minority workers are extraction and agriculture; other services; and manufacturing. The California industries with the lowest representations of minority workers are public administration and social services; education; and professional services.

**Figure C-3.**  
**Percent representation of women in various industries in California, 2010-2014**



Notes: \*\* Denotes that the difference in proportions between women workers in the specified industry and women workers in all industries is statistically significant at the 95% confidence level.

The representation of women among all California workers is 45.7%.

Workers in the finance, insurance, real estate, legal services, accounting, advertising, architecture, management, scientific research, and veterinary services industries were combined to one category of professional services. Workers in the rental and leasing; travel; investigation; waste remediation; arts; entertainment; recreation; accommodations; food services; and select other services were combined into one category of other services. Workers in child day care services, barber shops, beauty salons, nail salons, and other personal services were combined into one category of childcare, hair, and nails.

Source: BBC Research & Consulting from 2010-2014 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Figure C-3 indicates that the California industries with the highest representations of women workers are childcare, hair, and nails; healthcare; and education. The California industries with the lowest representations of women workers are transportation, warehousing, utilities, and communications; extraction and agriculture; and construction.



**Figure C-4.**  
**Demographic characteristics of workers in study-related industries**  
**and all industries, California and the United States, 2000**

California	All Industries (n= 788,333)	Construction (n= 48,798)	Professional Services (n=7,919)
<b>Race/ethnicity</b>			
Black American	6.3 %	3.3 % **	3.1 % **
Asian Pacific American	11.1	4.0 **	14.3 **
Subcontinent Asian American	1.1	0.2 **	1.5
Hispanic American	27.6	35.0 **	11.0 **
Native American	1.2	1.5 **	1.1
Other race minority	0.9	1.0	1.0
<b>Total minority</b>	<b>48.2 %</b>	<b>45.1 %</b>	<b>31.9 %</b>
Non-Hispanic white	51.8	54.9 **	68.1 **
<b>Total</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>
<b>Gender</b>			
Women	45.1 %	9.8 % **	27.4 **
Men	54.9	90.2 **	72.6 **
<b>Total</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>
United States	All Industries (n= 6,832,970)	Construction (n= 480,280)	Professional Services (n= 58,221)
<b>Race/ethnicity</b>			
Black American	10.9 %	6.2 % **	4.2 % **
Asian Pacific American	3.4	1.2 **	4.6 **
Subcontinent Asian American	0.7	0.2 **	1.3 **
Hispanic American	10.7	15.0 **	5.5 **
Native American	1.2	1.6 **	0.8 **
Other race minority	0.4	0.4	0.4
<b>Total minority</b>	<b>27.3 %</b>	<b>24.5 %</b>	<b>16.7 %</b>
Non-Hispanic white	72.7	75.5 **	83.3 **
<b>Total</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>
<b>Gender</b>			
Women	46.5 %	9.9 % **	26.0 **
Men	53.5	90.1 **	74.0 **
<b>Total</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>

Notes: \*\* Denotes that the difference in proportions between workers in each study-related industry and workers in all industries is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 2000 United States Census 5% sample Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Figure C-4 indicates that in 2000 there were significantly smaller percentages of Black Americans, Asian Pacific Americans, Subcontinent Asian Americans, and women working in the California construction industry than in all industries considered together. There were significantly smaller percentages of Black Americans, Hispanic Americans, and women working in the California professional services industry than in all industries considered together.

**Figure C-5.**  
**Demographic characteristics of workers in study-related industries and all industries, California and the United States, 2010-2014**

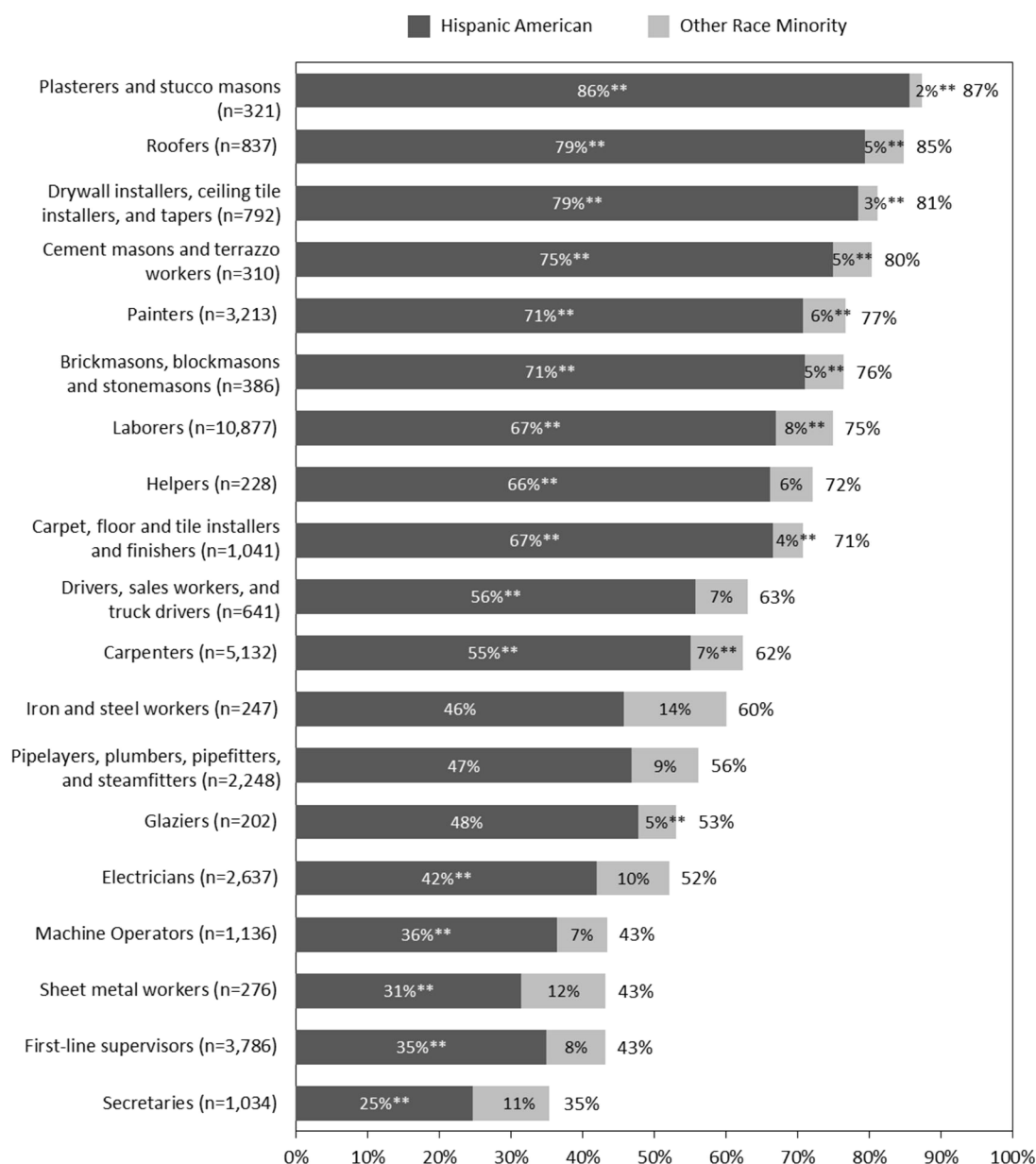
California	All Industries (n= 898,739)	Construction (n= 51,532)	Professional Services (n= 9,685)
<b>Race/ethnicity</b>			
Black American	5.9 %	2.6 % **	3.0 % **
Asian Pacific American	13.5	4.9 **	18.4 **
Subcontinent Asian American	1.9	0.3 **	2.5 **
Hispanic American	36.1	49.4 **	13.8 **
Native American	0.9	1.0	0.9
Other race minority	0.3	0.2 **	0.4
<b>Total minority</b>	<b>58.6 %</b>	<b>58.4 %</b>	<b>39.1 %</b>
Non-Hispanic white	41.4	41.6	60.9 **
<b>Total</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>
<b>Gender</b>			
Women	45.7 %	8.8 % **	26.6 % **
Men	54.3	91.2 **	73.4 **
<b>Total</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>
United States	All Industries (n= 7,609,482)	Construction (n= 467,817)	Professional Services (n= 76,126)
<b>Race/ethnicity</b>			
Black American	12.1 %	6.2 % **	5.1 % **
Asian Pacific American	4.5	1.2 **	5.9 **
Subcontinent Asian American	1.2	0.2 **	1.8 **
Hispanic American	15.8	15.0 **	7.8 **
Native American	1.1	1.6 **	0.8 **
Other race minority	0.2	0.4	0.2
<b>Total minority</b>	<b>35.1 %</b>	<b>24.5 %</b>	<b>21.6 %</b>
Non-Hispanic white	64.9	75.5 **	78.4 **
<b>Total</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>
<b>Gender</b>			
Women	47.2 %	9.9 % **	25.6 % **
Men	52.8	90.1 **	74.4 **
<b>Total</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>

Notes: \*\* Denotes that the difference in proportions between workers in each study-related industry and workers in all industries is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 2010-2014 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Figure C-5 indicates that there are significantly smaller percentages of Black Americans, Asian Pacific Americans, Subcontinent Asian Americans, other race minorities, and women working in the California construction industry than in all industries considered together. There are significantly smaller percentages of Black Americans, Hispanic Americans, and women working in the California professional services industry than in all industries considered together.

**Figure C-6.**  
**Percent representation of minorities in selected construction occupations in California, 2010-2014**



Notes: \*\* Denotes that the difference in proportions between minority workers in the specified occupation and minority workers in all construction occupations considered together is statistically significant at the 95% confidence level.

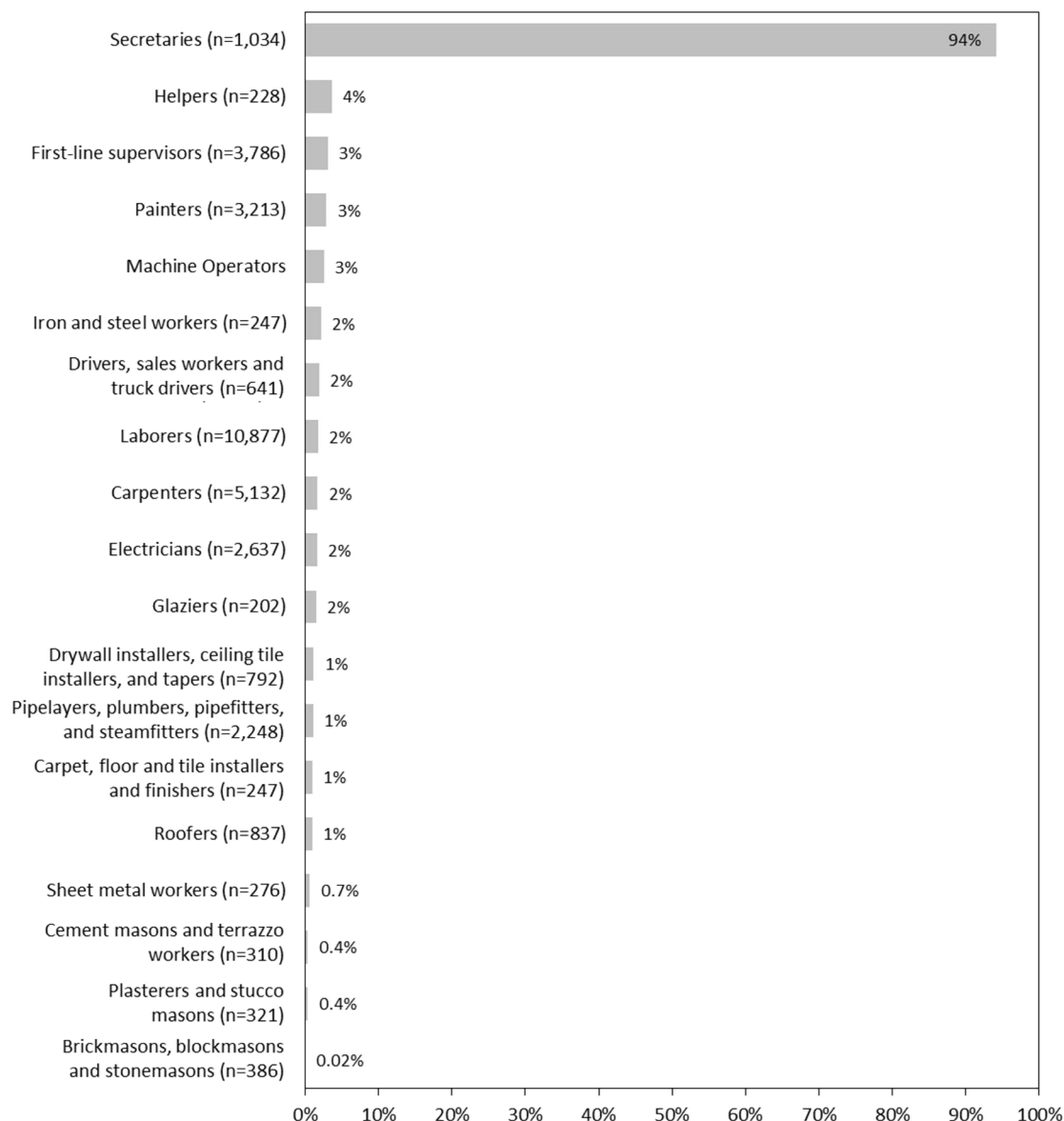
The representation of minorities among all California construction workers is 49.4% for Hispanic Americans, 8.9% for other race minorities, and 58.4% for all minorities considered together.

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 2010-2014 ACS 5% sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Figure C-6 indicates that the California construction occupations with the highest representations of minority workers are plasterers and stucco masons; roofers; and drywall installers, ceiling tile installers, and tapers. The California construction occupations with the lowest representations of minority workers are sheet metal workers, first-line supervisors, and secretaries.

**Figure C-7.**  
**Percent representation of women in selected construction occupations in California, 2010-2014**



Notes: \*\* Denotes that the difference in proportions between women workers in the specified occupation and women workers in all construction occupations considered together is statistically significant at the 95% confidence level.

The representation of women among all California construction workers is 8.8%.

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 2010-2014 ACS 5% sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Figure C-7 indicates that the California construction occupations with the highest representations of women workers are secretaries; helpers; and first-line supervisors. The California construction occupations with the lowest representations of women workers are cement masons and terrazzo workers; plasterers and stucco masons; and brickmasons, blockmasons, and stonemasons.

**Figure C-8.**  
**Percentage of workers who worked as a manager in each study-related industry, California and the United States, 2010-2014**

Note:

\*\* Denotes that the difference in proportions between the minority group and non-Hispanic whites (or between women and men) is statistically significant at the 95% confidence level.

Source:

BBC Research & Consulting from 2010-2014 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

California	Construction	Professional Services
<b>Race/ethnicity</b>		
Black American	4.2 % **	3.6 %
Asian Pacific American	10.4 **	2.4 **
Subcontinent Asian American	16.6	5.6
Hispanic American	2.8 **	2.3 **
Native American	6.9 **	8.6
Other race minority	7.4 **	2.1
Non-Hispanic white	13.7	4.5
<b>Gender</b>		
Women	7.4 %	2.0 % **
Men	7.9	4.5
<b>All individuals</b>	<b>7.8 %</b>	<b>3.9 %</b>
United States	Construction	Professional Services
<b>Race/ethnicity</b>		
Black American	4.4 % **	2.7 % **
Asian Pacific American	8.8	2.4 **
Subcontinent Asian American	14.8 **	5.4
Hispanic American	2.9 **	2.3 **
Native American	5.1 **	4.0
Other race minority	6.7 **	3.5
Non-Hispanic white	9.4	4.2
<b>Gender</b>		
Women	6.4 % **	1.9 % **
Men	7.6	4.5
<b>All individuals</b>	<b>7.5 %</b>	<b>3.9 %</b>

Figure C-8 indicates that, compared to non-Hispanic white Americans, significantly smaller percentages of Black Americans, Asian Pacific Americans, Hispanic Americans, Native Americans, and other race minorities work as managers in the California construction industry. Compared to non-Hispanic white Americans, a significantly smaller percentage of Asian Pacific Americans and Hispanic Americans work as managers in the California professional services industry. Compared to men, a significantly smaller percentage of women work as managers in the California professional services industry.

**Figure C-9.**  
**Mean annual wages,**  
**California and the**  
**United States,**  
**2010-2014**

**Notes:**

The sample universe is all non-institutionalized, employed individuals aged 25-64 that are not in school, the military, or self-employed.

**\*\***, **++** Denotes statistically significant differences from non-Hispanic whites (for minority groups) or from men (for women) at the 95% confidence level for the United States as a whole and California, respectively.

**Source:**

BBC Research & Consulting from 2010-2014 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center:  
<http://usa.ipums.org/usa/>.

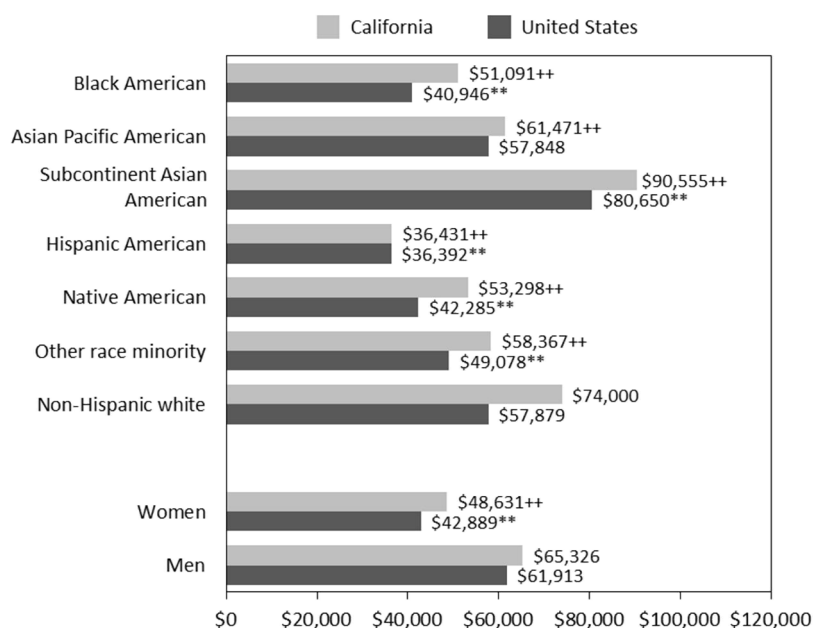


Figure C-9 indicates that, compared to non-Hispanic white Americans, Black Americans, Asian Pacific Americans, Hispanic Americans, Native Americans, and other race minorities in California exhibit significantly lower mean annual wages. In addition, women in California exhibit significantly lower mean annual wages than men.

**Figure C-10.**  
**Predictors of annual wages**  
**(regression), California, 2010-2014**

**Notes:**

The sample universe is all non-institutionalized, employed individuals aged 25-64 that are not in school, the military, or self-employed.

For ease of interpretation, the exponentiated form of the coefficients is displayed in the figure.

\*, \*\* Denotes statistical significance at the 90% and 95% confidence levels, respectively.

The referent for each set of categorical variables is as follows: non-Hispanic whites for the race variables, high school diploma for the education variables, and manufacturing for industry variables.

**Source:**

BBC Research & Consulting from 2010-2014 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Variable	Exponentiated Coefficient
Constant	6466.491 **
Black American	0.836 **
Asian Pacific American	0.881 **
Subcontinent Asian American	0.938 **
Hispanic American	0.848 **
Native American	0.864 **
Other minority group	0.895 **
Women	0.812 **
Less than high school education	0.869 **
Some college	1.218 **
Four-year degree	1.706 **
Advanced degree	2.337 **
Disabled	0.783 **
Military experience	1.030 **
Speaks English well	1.399 **
Age	1.069 **
Age-squared	0.999 **
Married	1.113 **
Children	1.007 **
Number of people over 65 in household	0.907 **
Public sector worker	1.149 **
Manager	1.310 **
Part time worker	0.386 **
Extraction and agriculture	0.707 **
Construction	0.928 **
Wholesale trade	0.898 **
Retail trade	0.760 **
Transportation, warehouse, & information	1.019 **
Professional services	1.025 **
Education	0.670 **
Health care	1.023 **
Other services	0.727 **
Public administration and social services	0.803 **

Figure C-10 indicates that, compared to being a non-Hispanic white American in California, being Black American, Asian Pacific American, Subcontinent Asian American, Hispanic American, Native American, or other race minority is related to significantly lower annual wages, even after accounting for various other personal characteristics. (For example, the model indicates that being Black American is associated with making approximately \$0.84 for every dollar that a non-Hispanic white American makes, all else being equal.) In addition, being a woman is related to significantly lower annual wages compared to being a man in California, even after accounting for various other personal characteristics.

**Figure C-11.**  
**Predictors of annual wages**  
**(regression), United States, 2010-**  
**2014**

**Notes:**

The sample universe is all non-institutionalized, employed individuals aged 25-64 that are not in school, the military, or self-employed.

For ease of interpretation, the exponentiated form of the coefficients is displayed in the figure.

\*, \*\* Denotes statistical significance at the 90% and 95% confidence levels, respectively.

The referent for each set of categorical variables is as follows: non-Hispanic whites for the race variables, high school diploma for the education variables, and manufacturing for industry variables.

**Source:**

BBC Research & Consulting from 2010-2014 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Variable	Exponentiated Coefficient
Constant	7846.998 **
Black American	0.865 **
Asian Pacific American	0.957 **
Subcontinent Asian American	0.960 **
Hispanic American	0.911 **
Native American	0.872 **
Other minority group	0.927 **
Women	0.786 **
Less than high school education	0.851 **
Some college	1.201 **
Four-year degree	1.667 **
Advanced degree	2.305 **
Disabled	0.795 **
Military experience	1.004 **
Speaks English well	1.335 **
Age	1.058 **
Age-squared	0.999 **
Married	1.113 **
Children	1.013 **
Number of people over 65 in household	0.910 **
Midwest	0.876 **
South	0.893 **
West	0.983 **
Public sector worker	1.120 **
Manager	1.312 **
Part time worker	0.368 **
Extraction and agriculture	0.931 **
Construction	0.919 **
Wholesale trade	0.963 **
Retail trade	0.754 **
Transportation, warehouse, & information	1.029 **
Professional services	1.056 **
Education	0.661 **
Health care	1.008 **
Other services	0.708 **
Public administration and social services	0.829 **

Figure C-11 indicates that, compared to being a non-Hispanic white American in the United States, being Black American, Asian Pacific American, Subcontinent Asian American, Hispanic American, Native American, or other race minority is related to significantly lower annual wages, even after accounting for various other personal characteristics. (For example, the model indicates that being Black American is associated with making approximately \$0.87 for every dollar that a non-Hispanic white American makes, all else being equal.) In addition, being a woman is related to significantly lower annual wages compared to being a man, even after accounting for various other personal characteristics.



**Figure C-12.**  
**Home Ownership Rates,**  
**California and the United**  
**States, 2010-2014**

Note:

The sample universe is all households.

**\*\***, **++** Denotes statistically significant differences from non-Hispanic whites at the 95% confidence level for the United States as a whole and California, respectively.

Source:

BBC Research & Consulting from 2010-2014 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

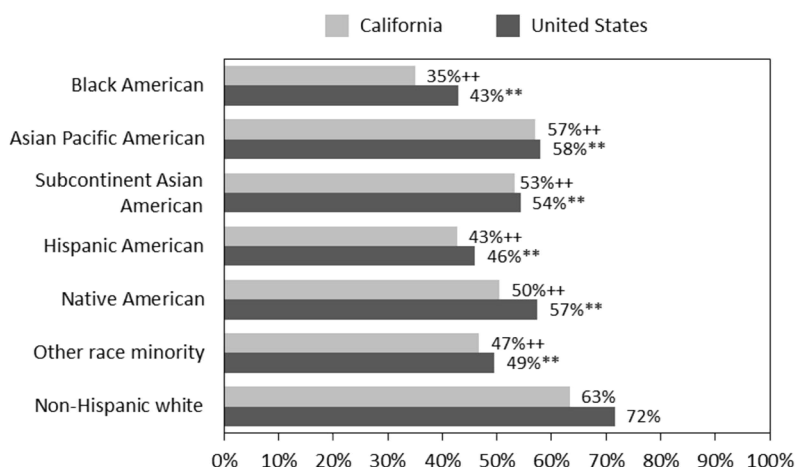


Figure C-12 indicates that, compared to non-Hispanic white Americans, significantly smaller percentages of Black Americans, Asian Pacific Americans, Subcontinent Asian Americans, Hispanic Americans, Native Americans, and other race minorities in California own homes.

**Figure C-13.**  
**Median home values,**  
**California and the**  
**United States, 2010-**  
**2014**

Note:

The sample universe is all owner-occupied housing units.

Source:

BBC Research & Consulting from 2010-2014 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

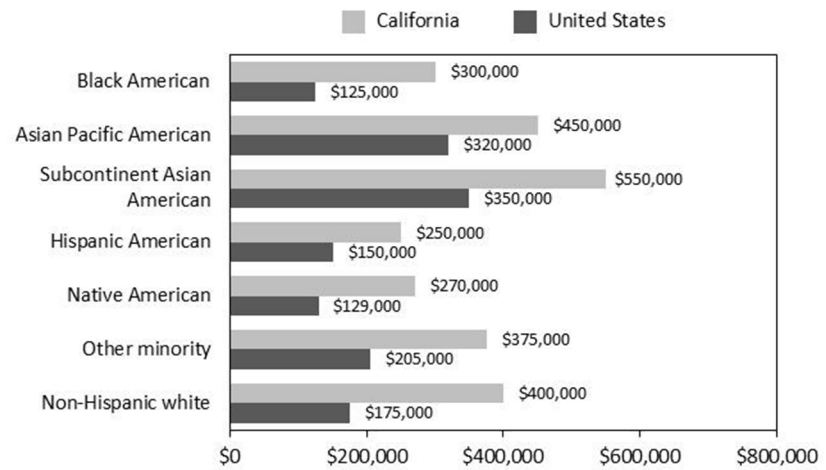


Figure C-13 indicates that Black American, Hispanic American, Native American, and other race minority homeowners in California own homes of lower median values than non-Hispanic white American homeowners.

**Figure C-14.**  
**Denial rates of**  
**conventional purchase**  
**loans for high-income**  
**households, California and**  
**the United States, 2007**  
**and 2014**

Note:

High-income borrowers are those households with 120% or more of the HUD area median family income (MFI).

Source:

FFIEC HMDA data 2007 and 2014. The raw data extract was obtained from the Consumer Financial Protection Bureau HMDA data tool: <http://www.consumerfinance.gov/hmda/explore>.

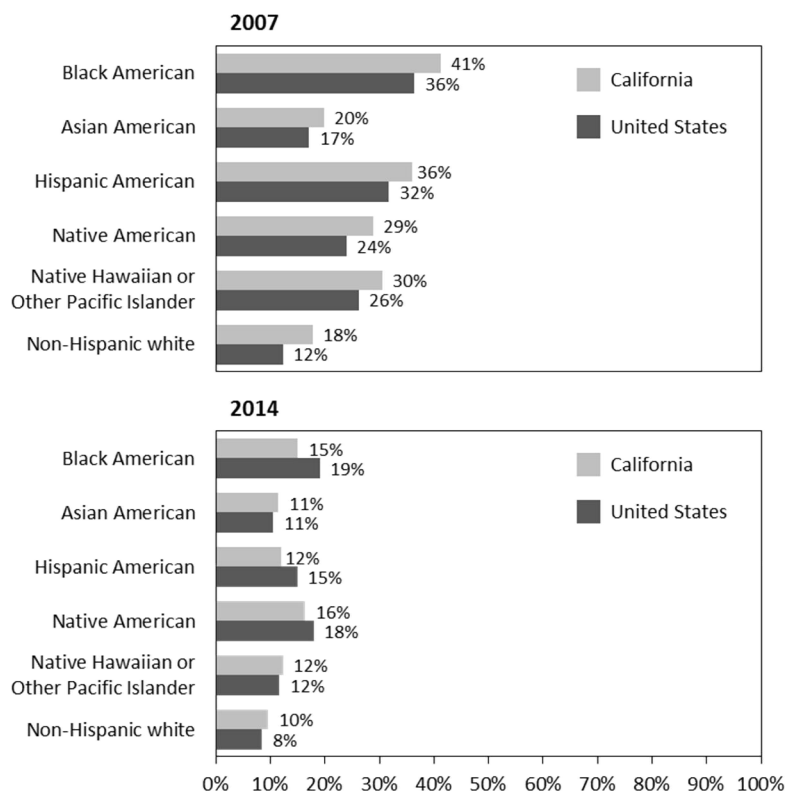


Figure C-14 indicates that in 2014 Black Americans; Asian Americans; Hispanic Americans; Native Americans; and Native Hawaiian or Other Pacific Islanders in California were denied conventional home purchase loans at a greater rate than non-Hispanic white Americans.

**Figure C-15.**  
**Percent of conventional**  
**home purchase loans that**  
**were subprime, California**  
**and the United States,**  
**2007 and 2014**

Source:

FFIEC HMDA data 2007 and 2014. The raw data extract was obtained from the Consumer Financial Protection Bureau HMDA data tool: <http://www.consumerfinance.gov/hmda/explore>.

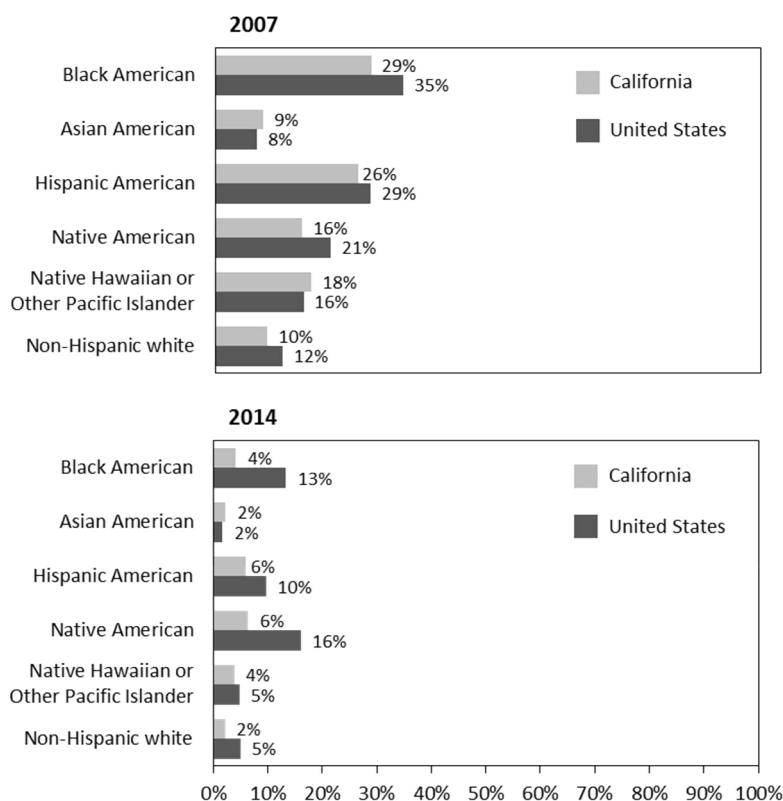
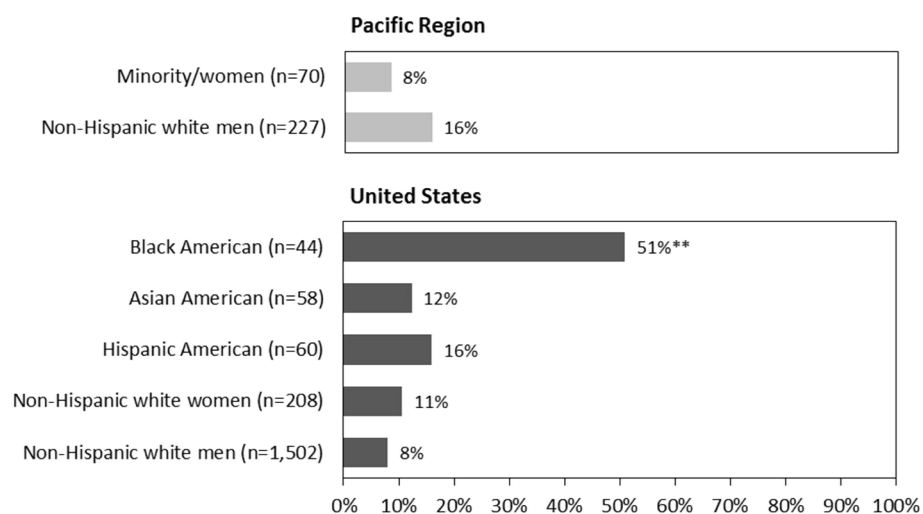


Figure C-15 indicates that in 2013 Black Americans; Hispanic Americans; Native Americans; and Native Hawaiian or Other Pacific Islanders in California were awarded subprime home loans at a higher rate than non-Hispanic white Americans.<sup>1</sup>

<sup>1</sup> HMDA data from 2014 presents data from home purchase loans that were actually initiated in 2013.

**Figure C-16.**  
**Business loan denial rates, Pacific Region and the United States, 2003**



Notes: \*\* Denotes that the difference in proportions from businesses owned by non-Hispanic white men is statistically significant at the 95% confidence level.

The Pacific Region consists of California, Alaska, Washington, Oregon, and Hawaii.

Source: BBC Research & Consulting from 2003 Survey of Small Business Finances.

Figure C-16 indicates that in 2003 Black American-owned businesses in the United States were denied business loans at a significantly greater rate than businesses owned by non-Hispanic white men.

**Figure C-17.**  
**Likelihood of business loan denial (probit regression) in the United States in the 2003 Survey of Small Business Finances,**  
**Dependent variable: loan denial**

Variable	Marginal Effect	Variable	Marginal Effect	Variable	Marginal Effect
<b>Race/ethnicity and gender</b>		<b>Firm's characteristics, credit and financial health</b>		<b>Firm and lender environment and loan characteristics</b>	
Black American	0.256 **	D&B credit score = moderate risk	-0.007	Partnership	-0.006
Asian American	-0.017	D&B credit score = average risk	0.036 *	S corporation	0.030 **
Hispanic American	-0.011	D&B credit score = significant risk	0.017	C corporation	0.040 *
Native American or other minority	0.031	D&B credit score = high risk	0.059 **	Construction industry	0.029
Women	0.019	Total employees	0.000	Manufacturing industry	0.013
Pacific region	0.057 **	Percent of business owned by principal	0.000	Transportation, communications and utilities industry	0.177 **
African American in Pacific region	-0.032	Family-owned business	-0.023	Finance, insurance and real estate industries	0.016
Asian American in Pacific region	0.033	Firm purchased	0.002	Engineering industry	-0.003
Hispanic American in Pacific region	0.026	Firm inherited	-0.036 **	Other industry	0.003
Native American or other minority in Pacific region	-0.017	Firm age	-0.001 **	Herfindahl index = .10 to .18	0.000
Women in Pacific region	-0.030 *	Firm has checking account	-0.147 *	Herfindahl index = .18 or above	0.028
<b>Owner's characteristics, credit and resources</b>		Firm has savings account	-0.025 **	Located in MSA	0.023 *
Age	-0.001	Firm has line of credit	-0.085 **	Sales market local only	0.014
Owner experience	0.002 **	Existing capital leases	-0.006	Loan amount	0.000
Some college	-0.010	Existing mortgage for business	0.021	Capital lease application	-0.017
Four-year degree	-0.003	Existing vehicle loans	0.018	Business mortgage application	-0.032 **
Advanced degree	-0.026 *	Existing equipment loans	-0.012	Vehicle loan application	-0.051 **
Log of home equity	0.001	Existing loans from stockholders	0.021	Equipment loan application	-0.019
Bankruptcy in past 7 years	0.098 *	Other existing loans	0.030 *	Loan for other purposes	-0.022 *
Judgement against in past 3 years	0.017	Firm used trade credit in past year	0.000		
Log of net worth excluding home	0.000	Log of total sales in prior year	-0.012 *		
		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		

Note: \*, \*\* Denotes statistically significant at the 90% and 95% confidence level, respectively.

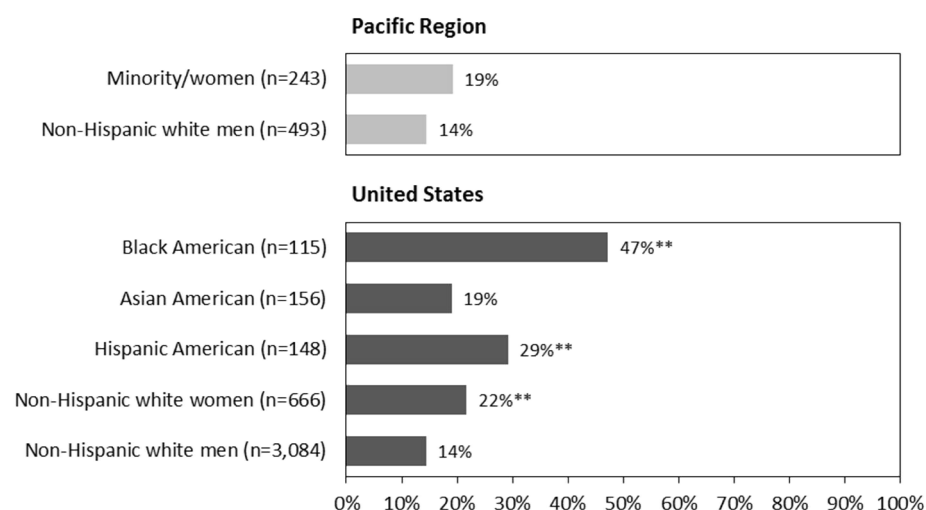
For ease of interpretation, the marginal effects of the probit coefficients are displayed in the figure. Significance is calculated using t-statistics from the probit coefficients associated with the marginal effects.

"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 out because of collinearity.

Source: BBC Research & Consulting analysis of 2003 Survey of Small Business Finances data.

Figure C-17 indicates that, compared to businesses owned by women nationally, woman-owned businesses in the Pacific Region have a lower likelihood of being denied a business loan, even after accounting for various other personal characteristics.

**Figure C-18.**  
**Businesses that did not apply for loans due to fear of denial, Pacific Region and the United States, 2003**



Notes: \*\* Denotes that the difference in proportions from businesses owned by non-Hispanic white men is statistically significant at the 95% confidence level.

The Pacific Region consists of California, Alaska, Washington, Oregon, and Hawaii.

Source: BBC Research & Consulting from 2003 Survey of Small Business Finances.

Figure C-18 indicates that in 2003 Black American-, Hispanic American-, and non-Hispanic white woman-owned businesses in the United States were significantly more likely than businesses owned by non-Hispanic white men to not apply for business loans due to a fear of denial.

**Figure C-19.**

**Likelihood of forgoing a loan application due to fear of denial (probit regression) in the United States in the 2003 Survey of Small Business Finances, Dependent variable: needed a loan but did not apply due to fear of denial**

Variable	Marginal Effect	Variable	Marginal Effect	Variable	Marginal Effect
<b>Race/ethnicity and gender</b>		<b>Firm's characteristics, credit and financial health</b>		<b>Firm and lender environment and loan characteristics</b>	
Black 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
Women	0.046 **	Total employees	0.000	Manufacturing industry	-0.012
Pacific region	0.037	Percent of business owned by principal	0.001 **	Transportation, communications and utilities industry	-0.049
African American in Pacific region	-0.081	Family-owned business	-0.009	Finance, insurance and real estate industries	0.041
Asian American in Pacific region	0.000	Firm purchased	-0.010	Engineering industry	-0.028
Hispanic American in Pacific region	-0.047	Firm inherited	-0.033	Other industry	0.010
Native American or other minority in Pacific region	0.424 **	Firm age	-0.003 **	Herfindahl index = .10 to .18	-0.005
Women in Pacific region	-0.051	Firm has checking account	0.010	Herfindahl index = .18 or above	0.024
<b>Owner's characteristics, credit and resources</b>		Firm has savings account	0.010	Located in MSA	0.047 **
Age	-0.002 **	Firm has line of credit	-0.005	Sales market local only	-0.063 **
Owner experience	0.002	Existing capital leases	0.030		
Less than high school education	0.041	Existing mortgage for business	0.050 **		
Some college	0.002	Existing vehicle loans	0.031 *		
Four-year degree	-0.036 *	Existing equipment loans	0.043 *		
Advanced degree	-0.021	Existing loans from stockholders	0.074 **		
Log of home equity	-0.004 **	Other existing loans	0.106 **		
Bankruptcy in past 7 years	0.227 **	Firm used trade credit in past year	0.018		
Judgement against in past 3 years	0.256 **	Log of total sales in prior year	-0.022 **		
Log of net worth excluding home	-0.025 **	Negative sales in prior year	-0.092 *		
		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: \*, \*\* Denotes statistically significant at the 90% and 95% confidence level, respectively.

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.

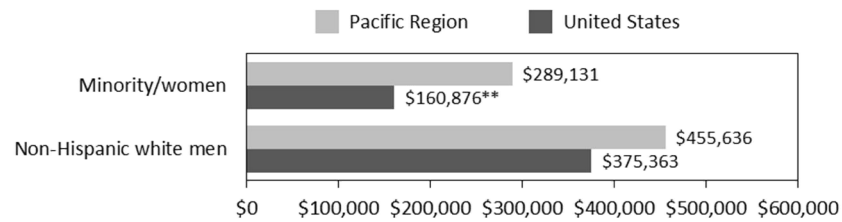
"Mining industry" perfectly predicted loan outcome and dropped out of the regression; "Owner has negative net worth" and "Negative total assets" dropped out because of collinearity.

Source: BBC Research & Consulting analysis of 2003 SSBF data.

Figure C-19 indicates that, compared to businesses owned by Native Americans or other race minorities nationally, businesses owned by Native Americans or other race minorities in the Pacific Region have a higher likelihood of forgoing a business loan application due to fear of denial, even after accounting for various other personal characteristics.



**Figure C-20.**  
**Mean values of approved business loans, Pacific Region and the United States, 2003**



Notes: \*\*Denotes statistically significant differences from non-Hispanic white men (for minority groups and women) at the 95% confidence level for the United States as a whole and the Pacific Region, respectively.

The Pacific Region consists of California, Alaska, Washington, Oregon, and Hawaii.

Source: BBC Research & Consulting from 2003 Survey of Small Business Finances.

Figure C-20 indicates that in 2003 minority- and woman-owned businesses in the United States who received business loans were approved for loans that were worth significantly less than those for which businesses owned by non-Hispanic white men were approved.

**Figure C-21.**  
**Self-employment rates in study-related**  
**industries, California and the United**  
**States, 2000**

Notes:

\*\* Denotes that the difference in proportions between the minority group and non-Hispanic whites (or between women and men) is statistically significant at the 95% confidence level.

Source:

BBC Research & Consulting from 2000 United States Census 5% sample Public Use Microdata samples. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

California	Construction	Professional Services
<b>Race/ethnicity</b>		
Black American	14.9 % **	6.4 % **
Asian Pacific American	25.9	10.5 **
Subcontinent Asian American	15.5	15.4
Hispanic American	11.8 **	8.6 **
Native American	22.0	21.8
Other minority group	25.4	22.9
Non-Hispanic white	26.5	18.5
<b>Gender</b>		
Women	13.7 % **	9.4 % **
Men	21.6	18.4
<b>All individuals</b>	<b>20.8 %</b>	<b>15.9 %</b>
<b>United States</b>		
<b>Race/ethnicity</b>		
Black American	15.2 % **	5.2 % **
Asian Pacific American	21.3 **	8.5 **
Subcontinent Asian American	17.9 **	6.2 **
Hispanic American	12.2 **	8.9 **
Native American	19.2 **	11.8
Other minority group	23.9	11.6
Non-Hispanic white	25.4	14.2
<b>Gender</b>		
Women	16.8 % **	7.5 % **
Men	23.3	15.1
<b>All individuals</b>	<b>22.6 %</b>	<b>13.2 %</b>

Figure C-21 indicates that in 2000 Black Americans and Hispanic Americans working in the California construction industry exhibited significantly lower rates of self-employment (i.e., business ownership) than non-Hispanic white Americans. In addition, women working in the California construction industry exhibited significantly lower rates of self-employment than men. Black Americans, Asian Pacific Americans, and Hispanic Americans working in the California professional services industry exhibited significantly lower rates of self-employment than non-Hispanic white Americans. In addition, women working in the California professional services industry exhibited significantly lower rates of self-employment than men.

**Figure C-22.**  
**Self-employment rates in study-related industries, California and the United States, 2010-2014**

Notes:

\*, \*\* Denotes that the difference in proportions between the minority group and non-Hispanic whites (or between women and men) is statistically significant at the 90 and 95% confidence level, respectively

Source:

BBC Research & Consulting from 2010-2014 ACS 5% Public Use Microdata samples. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

California	Construction	Professional Services
<b>Race/ethnicity</b>		
Black American	20.1 % **	9.9 % **
Asian Pacific American	28.7	9.2 **
Subcontinent Asian American	23.2	12.4 **
Hispanic American	19.0 **	10.7 **
Native American	26.0 *	23.3
Other minority group	28.1	10.0 *
Non-Hispanic white	30.0	20.1
<b>Gender</b>		
Women	14.6 % **	11.6 % **
Men	25.1	17.9
<b>All individuals</b>	<b>24.2 %</b>	<b>16.2 %</b>
United States	Construction	Professional Services
<b>Race/ethnicity</b>		
Black American	18.4 % **	6.5 % **
Asian Pacific American	23.6 **	7.6 **
Subcontinent Asian American	24.1	8.6 **
Hispanic American	17.8 **	9.3 **
Native American	18.5 **	11.8
Other minority group	24.2	12.4
Non-Hispanic white	26.8	13.0
<b>Gender</b>		
Women	16.3 % **	7.4 % **
Men	24.6	13.6
<b>All individuals</b>	<b>23.9 %</b>	<b>12.0 %</b>

Figure C-22 indicates that Black Americans, Hispanic Americans, and Native Americans working in the California construction industry show significantly lower rates of self-employment (i.e., business ownership) than non-Hispanic white Americans. In addition, women working in the California construction industry show significantly lower rates of self-employment than men. Black Americans, Asian Pacific Americans, Subcontinent Asian Americans, Hispanic Americans and other race minorities working in the California professional services industry exhibited lower rates of self-employment than non-Hispanic white Americans. In addition, women working in the California professional services industry exhibited lower rates of self-employment than men.

**Figure C-23.**  
**Predictors of business ownership in**  
**construction (regression), California,**  
**2010-2014**

Notes:

The regression included 46,637 observations.

\*, \*\* Denote statistical significance at the 90% and 95% confidence levels, respectively.

The referent for each set of categorical variables is as follows: high school diploma for the education variables and non-Hispanic whites for the race variables.

Source:

BBC Research & Consulting from 2010-2014 ACS 5% Public Use Microdata samples. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa>.

Variable	Coefficient
Constant	-1.9317 **
Age	0.0395 **
Age-squared	-0.0002 **
Married	-0.0138
Disabled	-0.0127
Number of children in household	0.0005
Number of people over 65 in household	0.0236
Owns home	-0.2314 **
Home value (\$000s)	0.0003 **
Monthly mortgage payment (\$000s)	0.0622 **
Interest and dividend income (\$000s)	0.0017 **
Income of spouse or partner (\$0000s)	0.0051 **
Speaks English well	-0.0176
Less than high school education	0.0516 **
Some college	0.0569 **
Four-year degree	0.0227
Advanced degree	-0.1835 **
Black American	-0.2195 **
Asian Pacific American	-0.0290
Subcontinent Asian American	-0.1825
Hispanic American	-0.2159 **
Native American	-0.0103
Other minority group	0.0628
Women	-0.5322 **

Figure C-23 indicates that, compared to being a non-Hispanic white American in California, being Black American or Hispanic American is related to a significantly lower likelihood of owning a construction business, even after accounting for various other personal characteristics. In addition, compared to being a man in California, being a woman is related to a significantly lower likelihood of owning a construction business after accounting for various other personal characteristics.

**Figure C-24.**  
**Disparities in business ownership rates for California construction workers, 2010-2014**

Group	Self-Employment Rate		Disparity Index (100 = Parity)
	Actual	Benchmark	
Black American	21.4%	27.6%	78
Hispanic American	19.2%	24.2%	79
Non-Hispanic white women	16.7%	33.6%	50

Notes: The benchmark figure can only be estimated for records with observed (rather than imputed) dependent variable. Thus, the study team made comparisons between actual and benchmark self-employment rates only for the subset of the sample for which the dependent variable was observed.

Analyses are limited to those groups that showed negative coefficients that were statistically significant in the regression model.

Source: BBC Research & Consulting from 2010-2014 ACS 5% Public Use Microdata samples. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Figure C-24 indicates that Black Americans own construction businesses in California at a rate that is 78 percent that of similarly-situated non-Hispanic white Americans (i.e., non-Hispanic white Americans who share the same personal characteristics). Hispanic Americans own construction businesses in California at a rate that is 79 percent that of similarly-situated non-Hispanic white Americans. In addition, non-Hispanic white women own construction businesses in California at a rate that is 50 percent that of similarly-situated non-Hispanic white men (i.e., non-Hispanic white men who share the same personal characteristics).

**Figure C-25.**  
**Predictors of business ownership in**  
**professional services (regression),**  
**California, 2010-2014**

Notes:

The regression included 9,060 observations.

\*, \*\* Denote statistical significance at the 90% and 95% confidence levels, respectively.

The referent for each set of categorical variables is as follows: high school diploma for the education variables and non-Hispanic whites for the race variables.

Source:

BBC Research & Consulting from 2010-2014 ACS 5% Public Use Microdata samples. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Variable	Coefficient
Constant	-2.6679 **
Age	0.0383 **
Age-squared	-0.0001
Married	-0.0064
Disabled	-0.0516
Number of children in household	-0.0131
Number of people over 65 in household	-0.0040
Owns home	-0.1319 *
Home value (\$000s)	0.0002 **
Monthly mortgage payment (\$000s)	0.0189
Interest and dividend income (\$000s)	0.0004
Income of spouse or partner (\$0000s)	0.0004
Speaks English well	-0.0576
Less than high school education	0.0134
Some college	0.2048 *
Four-year degree	0.2580 **
Advanced degree	0.2701 **
Black American	-0.3589 **
Asian Pacific American	-0.4308 **
Subcontinent Asian American	-0.2399 *
Hispanic American	-0.1285 *
Native American	0.2461
Other minority group	-0.2538
Women	-0.1877 **

Figure C-25 indicates that, compared to being a non-Hispanic white American in California, being Black American, Asian Pacific American, Subcontinent Asian American, and Hispanic American is related to a significantly lower likelihood of owning a professional services business, even after accounting for various other personal characteristics. In addition, compared to being a man in California, being a woman is related to a significantly lower likelihood of owning a professional services business, all else being equal.

**Figure C-26.**  
**Disparities in business ownership rates for California professional services workers, 2010-2014**

Group	Self-Employment Rate		Disparity Index (100 = Parity)
	Actual	Benchmark	
Black American	9.4%	15.5%	61
Asian Pacific American	9.3%	18.5%	50
Subcontinent Asian American	13.5%	18.4%	73
Hispanic American	10.7%	13.8%	77
Non-Hispanic white women	14.8%	19.1%	77

Notes: The benchmark figure can only be estimated for records with observed (rather than imputed) dependent variable. Thus, the study team made comparisons between actual and benchmark self-employment rates only for the subset of the sample for which the dependent variable was observed.

Analyses are limited to those groups that showed negative coefficients that were statistically significant in the regression model.

Source: BBC Research & Consulting from 2010-2014 ACS 5% Public Use Microdata samples. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Figure C-26 indicates that Black Americans own professional services businesses in California at a rate that is 61 percent that of similarly-situated non-Hispanic white Americans (i.e., non-Hispanic white Americans who share the same personal characteristics). Asian Pacific Americans own professional services businesses in California at a rate that is 50 percent that of similarly-situated non-Hispanic white Americans. Subcontinent Asian Americans own professional services businesses in California at a rate that is 73 percent that of similarly-situated non-Hispanic white Americans. Hispanic Americans own professional services businesses in California at a rate that is 77 percent that of similarly-situated non-Hispanic white Americans. Finally, non-Hispanic white women own professional services businesses in California at a rate that is 77 percent that of similarly-situated non-Hispanic white men (i.e., non-Hispanic white men who share the same personal characteristics).

**Figure C-27.**  
**Rates of business**  
**closure, expansion, and**  
**contraction, California**  
**and the United States,**  
**2002-2006**

**Notes:**

Data include only to non-publicly held businesses.

Equal Gender Ownership refers to those businesses for which ownership is split evenly between women and men.

Statistical significance of these results cannot be determined, because sample sizes were not reported.

**Source:**

Lowrey, Ying. 2010. "Race/Ethnicity and Establishment Dynamics, 2002-2006." United States Small Business Administration Office of Advocacy. Washington D.C.

Lowrey, Ying. 2014. "Gender and Establishment Dynamics, 2002-2006." United States Small Business Administration Office of Advocacy. Washington D.C.

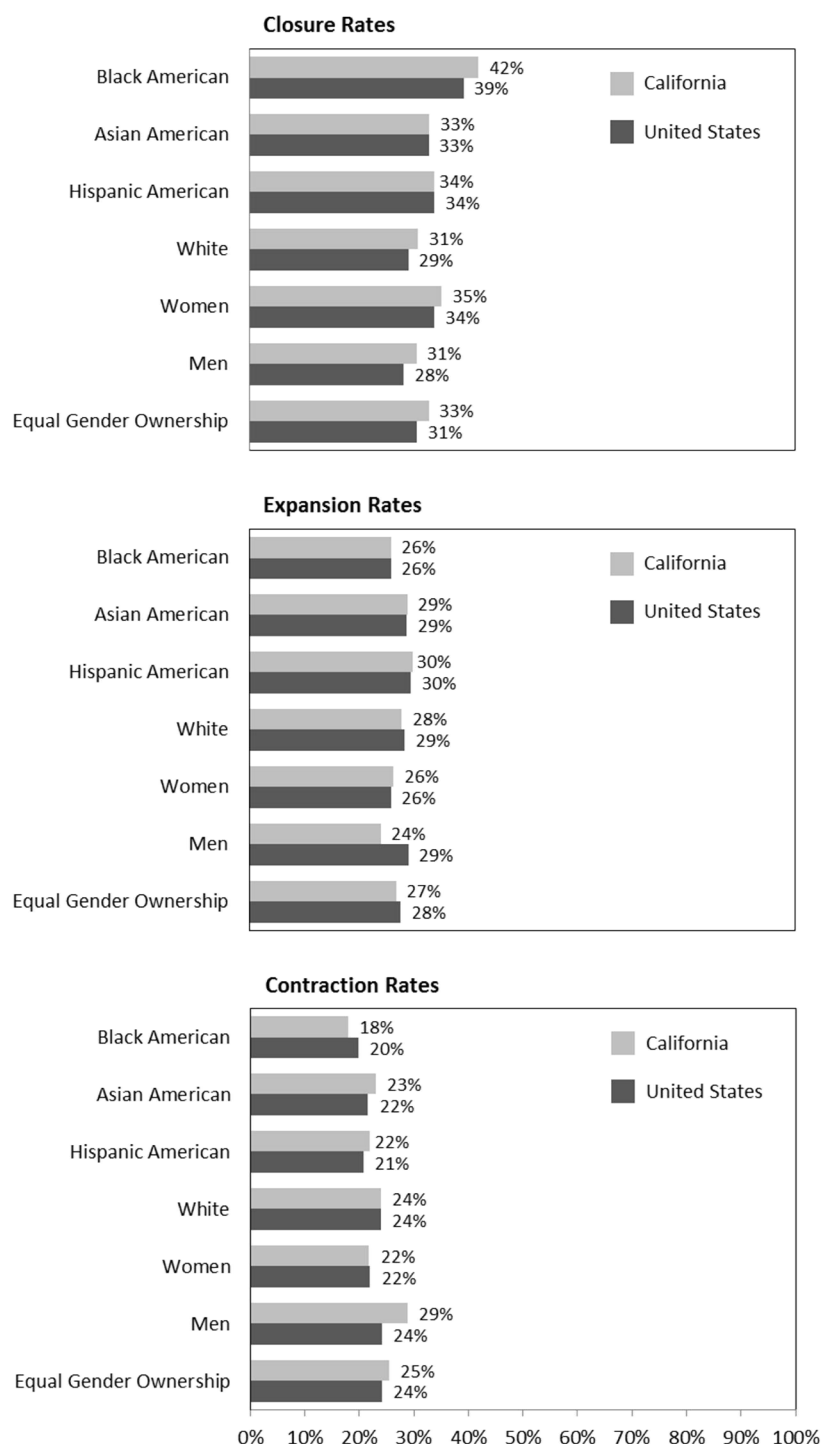


Figure C-27 indicates that Black American-, Asian American-, and Hispanic American-owned businesses in California show higher closure rates than white American-owned businesses. Woman-owned businesses in California show higher closure rates than businesses owned by men. Black American-owned businesses in California show lower expansion rates than white American-owned businesses.



**Figure C-28.**  
**Mean annual business**  
**receipts (in thousands),**  
**California and the United**  
**States, 2012**

Note:

Includes employer and non-employer firms. Does not include publicly-traded companies or other firms not classifiable by race/ethnicity and gender.

Source:

2012 Survey of Business Owners, part of the United States Census Bureau's 2012 Economic Census.

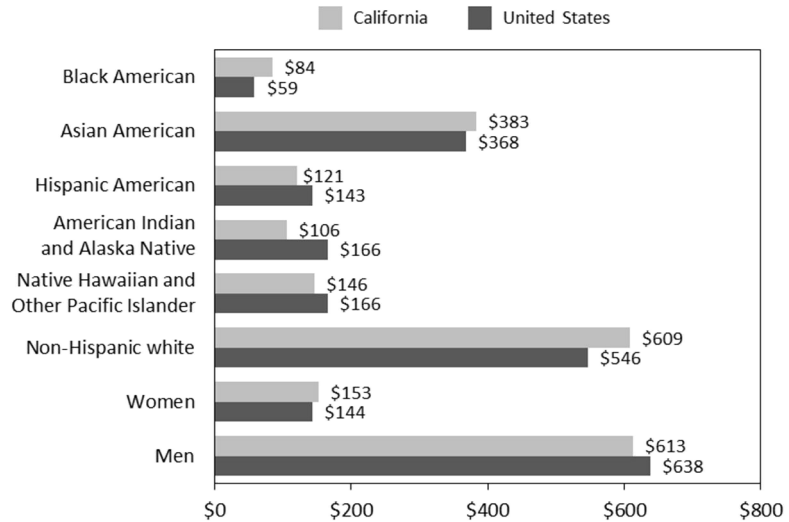


Figure C-28 indicates that in 2012 Black American-, Asian American-, Hispanic American-, American Indian and Alaska Native-, and Native Hawaiian and Other Pacific Islander-owned businesses in California showed lower mean annual business receipts than non-Hispanic white American-owned businesses. In addition, woman-owned businesses in California showed lower mean annual business receipts than businesses owned by men.

**Figure C-29.**  
**Mean annual business**  
**owner earnings, California**  
**and the United States,**  
**2010-2014**

**Notes:**

The sample universe is business owners age 16 and over who reported positive earnings. All amounts in 2014 dollars.

**\*\***, **++** Denotes statistically significant differences from non-Hispanic whites (for minority groups) or from men (for women) at the 95% confidence level for the United States as a whole and California, respectively.

**+** Denotes statistically significant differences from non-Hispanic whites (for minority groups) or from men (for women) at the 90% confidence level for California.

**Source:**

BBC Research & Consulting from 2010-2014 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

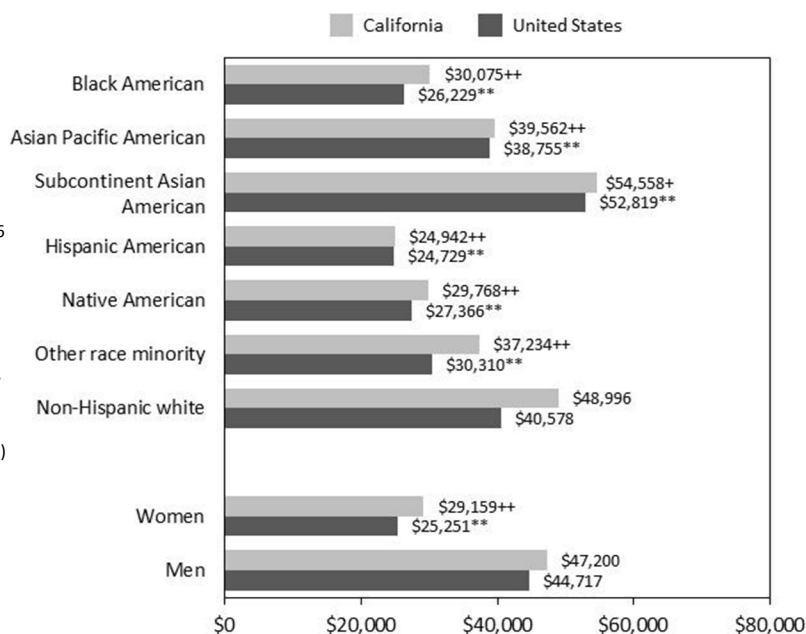


Figure C-29 indicates that Black American, Asian Pacific American, Hispanic American, Native American, and other race minority business owners in California earned significantly less on average than non-Hispanic white American business owners. In addition, women business owners in California earn significantly less on average than male businesses owners.

**Figure C-30.**  
**Predictors of business owner earnings**  
**(regression), California 2010-2014**

**Notes:**

For ease of interpretation, the exponentiated form of the coefficients is displayed in the figure.

The sample universe is business owners age 16 and over who reported positive earnings. All amounts in 2014 dollars.

\*, \*\* Denotes statistical significance at the 90% and 95% confidence level, respectively.

The referent for each set of categorical variables is as follows: high school diploma for the education variables and non-Hispanic whites for the race variables.

**Source:**

BBC Research & Consulting from 2010-2014 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Variable	Exponentiated Coefficient
Constant	601.073 **
Age	1.141 **
Age-squared	0.999 **
Married	1.209 **
Speaks English well	1.257 **
Disabled	0.586 **
Less than high school	0.806 **
Some college	1.059 **
Four-year degree	1.336 **
Advanced degree	1.940 **
Black American	0.735 **
Asian Pacific American	0.950 *
Subcontinent Asian American	1.167 **
Hispanic American	0.940 **
Native American	0.721 **
Other race minority	0.979
Women	0.574 **

Figure C-30 indicates that, compared to being a non-Hispanic white American business owner in California, being a Black American, Asian Pacific American, Hispanic American, or Native American business owner is related to significantly lower earnings, even after accounting for various other business and personal characteristics. (For example, the model indicates that being a Black American business owner is associated with making approximately \$0.74 for every dollar that a non-Hispanic white American business owner makes, all else being equal.) In addition, compared to being a male business owner in California, being a woman business owner is related to significantly lower earnings, all else being equal.

**Figure C-31.**  
**Predictors of business owner earnings**  
**(regression), United States, 2010-2014**

**Notes:**

For ease of interpretation, the exponentiated form of the coefficients is displayed in the figure.

The sample universe is business owners age 16 and over who reported positive earnings. All amounts in 2014 dollars.

\*, \*\* Denotes statistical significance at the 90% and 95% confidence level, respectively.

The referent for each set of categorical variables is as follows: high school diploma for the education variables and non-Hispanic whites for the race variables.

**Source:**

BBC Research & Consulting from 2010-2014 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Variable	Exponentiated Coefficient
Constant	429.689 **
Age	1.156 **
Age-squared	0.999 **
Married	1.253 **
Speaks English well	1.172 **
Disabled	0.584 **
Less than high school	0.751 **
Some college	1.060 **
Four-year degree	1.327 **
Advanced degree	2.001 **
Black American	0.835 **
Asian Pacific American	1.119 **
Subcontinent Asian American	1.160 **
Hispanic American	1.058 **
Native American	0.687 **
Other race minority	1.130 **
Women	0.533 **

Figure C-31 indicates that, compared to being a non-Hispanic white American business owner in the United States, being a Black American or Native American business owner is related to significantly lower earnings, even after accounting for various other business and personal characteristics. (For example, the model indicates that being a Black American business owner is associated with making approximately \$0.84 for every dollar that a non-Hispanic white American business owner makes, all else being equal.) In addition, compared to being male business owner in the United States, being a woman business owner is related to significantly lower earnings, all else being equal.

## **APPENDIX D.**

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### **Qualitative Information about Marketplace Conditions**

# APPENDIX D.

## Qualitative Information about Marketplace Conditions

Appendix D presents qualitative information that the study team collected and analyzed as part of the disparity study. Over 700 business and trade association representatives provided input for Appendix D, which includes the following eleven parts:

**A. Introduction** describes the process for gathering and analyzing the information summarized in Appendix D. *(page 2)*

**B. Background on Construction and Professional Service Industries** summarizes information about how businesses become established and how companies change over time. Part B also presents information about challenges related to starting, operating, and growing a business; the effects of the economic downturn; and business owners' experiences pursuing public- and private-sector work. *(page 3)*

**C. Keys to Business Success** summarizes information about certain barriers to doing business and keys to success including access to financing, bonding, and insurance. *(page 39)*

**D. 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 59)*

**E. Potential Barriers to Doing Business with Public Agencies** presents information about successes and potential barriers to doing work in general and specifically for California state entities. *(page 74)*

**F. Other Allegations of Unfair Treatment** presents information about any experiences with unfair treatment such as bid shopping; treatment during performance of work; and double-standards for minority- or woman-owned firms. *(page 109)*

**G. Insights Regarding any Race-/Ethnicity- or Gender-based Discrimination** includes additional information concerning potential race-/ethnicity- 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 minority- and woman-owned businesses. *(page 120)*

**H. Insights Regarding Business Assistance Programs, Changes in Contracting Processes, or Any Other Neutral Measures** presents information about business assistance programs, efforts to open contracting processes, and other steps to remove barriers for all businesses or small businesses. *(page 134)*

**I. Insights Regarding DBE or SB/DVBE Programs or Any Other Race-/Ethnicity- or Gender-based Measures** presents information about the Federal Disadvantaged Business Enterprise (DBE) Program and the State of California's Small Business and Disabled Veteran Business Enterprise (SB/DVBE) Program, including any impacts of DBE or SB/DVBE contract goals on other

businesses. It also presents information about advantages and disadvantages that subcontractors experience because of their certification as DBEs or SB/DVBEs. *(page 166)*

**J. DBE and SB/DVBE Certification** presents comments on the processes for DBE and SB/DVBE certification and other certifications. *(page 189)*

**K. Any Other Insights and Recommendations Concerning Caltrans Contracting or DBE/SB/DVBE Programs** presents suggestions for Caltrans to improve implementations of their small business, DBE, or DVBE programs. It also presents other related insights and recommendations. *(page 199)*

## **A. Introduction**

Business owners and managers; trade association representatives; and other interested parties had the opportunity to discuss their experiences working in the California through a number of channels:

- Participating in an in-depth interview;
- Participating in an availability survey;
- Providing oral testimony during a public forum; and
- Submitting written testimony.

The study team conducted in-depth interviews and availability surveys from September 2015 through May 2016. Caltrans and BBC Research & Consulting (BBC) held five public forums throughout the state in November 2015. During those forums, the study team solicited verbal and written testimony concerning the 2016 Caltrans Disparity Study. In addition, BBC collected written and verbal testimony throughout the study, and interested parties had the opportunity to submit written testimony directly to the study team via fax or email.

**In-depth interviews.** The study team conducted in-depth interviews with 59 California businesses and one trade association. The interviews included discussions about interviewees' perceptions and anecdotes regarding the local contracting industry; Caltrans' SB/DVBE Program; the Federal DBE Program; and experiences working or attempting to work with California state entities. Interviews were conducted by PDA Consulting Group—a Cerritos-based DBE-certified consulting firm—and GCAP Services—a Costa Mesa-based DBE-certified consulting firm.

Interviewees included individuals representing construction businesses, professional services firms, 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 the business owners. The study team conducted most of the interviews with the owner, president, chief executive officer, or another high-level manager of the business or association. Some of the businesses that the study team interviewed indicated that they work exclusively (or, at least primarily) as prime contractors or subcontractors, and some indicated that they work as both. All of the businesses that participated in the interviews conduct work in California.

All interviewees are identified in Appendix D by random interviewee numbers (i.e., #1, #2, #3, etc.). In order to protect the anonymity of individuals or businesses mentioned in interviews, the study team has generalized any comments that could potentially identify specific individuals or businesses. In addition, the study team indicates whether each interviewee represents a small business enterprise- (SBE-), DVBE-, or DBE-certified business and reports the race/ethnicity and gender of the business owner.

**Availability surveys.** As a part of availability surveys that the study team conducted for the disparity study, the study team asked firm owners and managers whether their companies have experienced barriers or difficulties associated with starting or expanding businesses in their industries or with obtaining work. A total of 686 businesses provided comments. The study team analyzed responses to those questions and provided examples of different types of comments in Appendix D. Availability survey comments are indicated throughout Appendix D by the prefix “AV.”

**Public forums.** In November 2015, Caltrans and the study team solicited written and verbal testimony at public forums across the state. Public forums were held on the following dates in the following locations:

- Fresno—November 4, 2015;
- Oakland—November 5, 2015;
- Los Angeles—November 6, 2015;
- Marysville—November 12, 2015; and
- San Diego—November 13, 2015.

The study team reviewed and analyzed comments from those meetings and provided a summary of that information in Appendix D. Public forum comments are indicated by the prefix “PF” throughout Appendix D.

**Written testimony.** All written testimony received by e-mail or fax was analyzed by the study team and is provided in Appendix D. Written testimony is indicated by the prefix “WT” throughout Appendix D.

## **B. Background on Construction and Professional Services Industries in California**

Part B summarizes information related to:

- Business formation and establishment (*page 4*);
- Challenges related to starting, operating, and growing a business (*page 7*);
- Types of work that businesses perform (*page 13*);
- Employment size of businesses (*page 14*);



- Ability of businesses to perform on different types and sizes of contracts (*page 17*);
- Local effects of the economic downturn (*page 19*);
- Current economic conditions (*page 25*); and
- Business owners' experiences pursuing public- and private-sector work (*page 29*).

**Business formation and establishment.** Most interviewees reported that their companies were started (or purchased) by individuals with connections in their respective industries.

**Many business owners worked in the industry or a related industry before starting their own businesses.** [e.g., #4, #9, #17, #18, #22, #25, #28, #29, #31, #33, #35, #36, #37, #38, #41, #43, #44, #46a, #50, #51, #53, #55, #56, #57, #58] For example:

- The Black American female owner of a DBE- and small local business enterprise (SLBE)-certified construction-related business stated that she started her business in the late 2000's after working for ten years in a separate but related field. [#48]
- The Native American male owner of a DBE-certified construction-related firm stated that he started his business by obtaining the license required in his industry. He said that he was working for other companies for two years and then obtained a Request for Proposal for a local school district, submitted a proposal, and won the project. He noted that he has been "on his own since then." [#49]
- The Black American female owner of a construction-related business reported that she worked in the industry for a number of years prior to starting her own firm and loved the work. She eventually left the company she worked at to start her own firm saying that she "thought she could do it better." [#2]
- The Black American male owner of a DBE- and SBE-certified contracting firm reported that he worked in the industry for a number of years before starting his firm. He stated that after working for several union firms, he decided to go out on his own. [#61]
- The female owner of a WBE-certified transportation firm reported that she and her husband established the business in the late 1990's. She said that her husband owned the business for over a decade on his own before she bought into the company. She said they both have backgrounds in the transportation industry. [#34]
- The non-Hispanic white male owner of a SBE- and DVBE-certified specialty construction firm reported that while working on a small construction project, he watched someone perform striping work and thought, "That looks like it might be kind of fun to do; I just might want to look into that." Shortly

thereafter, he purchased the necessary equipment and began striping parking lots for a land developer. [#8]

- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm reported that he worked in the industry for over 20 years—working his way from an introductory position to management—before deciding to start his own firm in the late 2000’s. [#10]
- The non-Hispanic white male representative of a Subcontinent Asian American MBE-certified services provider stated that the business was established five years ago when the owner bought a failing business. [#21]
- The female owner of a DBE- and WBE-certified construction firm reported that she worked with her father and learned about the construction industry from him before establishing her own business. [PF#16]
- Regarding the start-up of his business, the Black American male owner of a specialty contracting business said, “My father’s been doing [this work] for [decades] now, so I started working with him, [gaining] experience, and [I] got my license when I was [in my 20’s]. [I] slowly built [the business] over the years and slowly...transitioned a lot of [my father’s] old work to [me] so he could semi-retire.” [#27]
- The Hispanic American male representative of a DBE- and SBE-certified specialty supply firm reported that the owner of the business started the firm after his prior employer’s business underwent reorganization. [#11]
- The Black American male representative of a trade organization that represents contractors said, “We basically started the organization with respect to logistics and trucking. Trucking was one aspect, then consulting, and then we decided to just make it a little bit broader and get the other trades involved as well.” [#52]
- The non-Hispanic white female owner of a WBE-certified specialty construction firm reported that she assumed ownership and control of the company from her husband. She said that the City of San Diego wanted to contract with minority businesses and asked her husband to start a firm. She reported that the City said they would give him some work and that they could become certified as a DBE. [#7]
- The Black American male owner of a DBE-, MBE-, and California Public Utilities Commission (CPUC)-certified specialty construction firm reported that his family has always worked in construction. He said, “My father was involved in construction in the 1950s in [California].” He added that he and his family “wanted to make money in construction, so we decided to go into business.” [#47]

- The Hispanic American female owner of a WBE-, SBE-, and MBE-certified general contracting firm reported that she started out by working for a large company. She reported that she and her husband observed that the company was losing business to minority-owned businesses. She stated that they saw an opportunity to capture that minority work and explained that “I saw an opportunity...[and thought] we should probably look into starting a business on our own. I saw a niche for me that I had experience working in the field, so it was an opportunity that I just took advantage of.” [#13]
- The Hispanic American female owner of a MBE-certified specialty services firm reported that she started by working as a foreperson for another company. She commented that though she was getting very little work, she enjoyed the work and wanted her own business in the same field. She said that she has spent most of her working years self-employed. [#5]
- The Hispanic American male owner of a specialty contracting company stated that he started his business after working for a family member in the same industry. He said, “I realized I was doing everything...and didn’t need him, so I decided to go on my own.” [#40]
- The non-Hispanic white female owner of an SBE-certified specialty consulting company stated that the business started in the late 1970’s but that she took the business over more recently. [#20]
- The non-Hispanic white female owner of an SBE-certified specialty contracting business reported that she bought her first piece of large equipment in the early 1990’s. She said, “We were the only...company [with our specialty] in [the area].” A year later, she acquired her contractor’s license because she thought it would be beneficial to her business. She said, “I actually used to go out and [complete the work myself]. I did have help [from one other person] and that is how we started. I did front and back office, did the dispatching, and everything that was necessary to run [this type of business].” [#24]
- The Black American male owner of an MBE-certified contracting firm commented that he holds several contracting licenses. He said that he worked in the construction industry for decades and started his firm approximately five years ago to provide construction management services. [#15]
- The Subcontinent Asian American owner of an architecture and design firm stated that he has been working in the industry for over twenty years. He commented that he started the business in the late 2000’s when several people encouraged him to do so. [#6]
- The Hispanic American male representative of a DBE- and SBE-certified woman-owned engineering firm reported that “the owner used to work for another firm in town, and she went off and started her own business.” [#23]

- The non-Hispanic white male owner of an engineering firm stated that he started his own business after working in the field for more than a decade because he “just wanted the flexibility of being on my own.” [#42]
- The female representative of a CPUC WBE-certified specialty construction firm reported that the owner previously worked for another firm in the same industry, and he left that company to start his own business. She remarked that he subsequently allocated a fifty-one percent interest to a woman, which qualified the firm for WBE certification. [#16]
- The Black American male owner of a DBE- and SBE-certified construction-related firm stated, “I was in the real estate business...then the market imploded, [and I stopped working].” He said that a friend in the construction industry suggested that he start the business and that if he did, the friend would “try and get [him] some work. So I went ahead and put some money together and got [the necessary equipment.]” [#19]
- The non-Hispanic white male owner of an SBE-certified specialty contracting company said that he started his business as a supplier but gradually added contracting services until that became the focus of the company. [#32]
- The non-Hispanic white male owner of a concrete inspection agency stated that he first started by obtaining his certification in concrete-related testing and inspecting then began working for various agencies on an as-needed basis. When he started picking up his own clients, he formed his own business. [#59]
- The Black American male owner of a DBE- and MBE-certified construction business stated that he began working in construction after he was discharged from the military, and he began working in various construction jobs in California and Alaska. He later came back to the Bay Area and decided to start his own business. [#60]

**Challenges in starting, operating, and growing a business.** Interviewees’ comments about the challenges related to starting, operating, and growing a business varied.

**Many reported a combination of challenges related to starting, sustaining, or growing their businesses.** Some businesses faced a number of barriers. For example:

- The Hispanic American male representative of a DBE- and SBE-certified specialty supply firm said that aside from supplying the product and showing it to be “of good quality...getting established is probably the...most difficult part [of owning a business].” [#11]
- The Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm shared that the business started “out of a need to eat.” She reported that she formerly owned an art gallery, and her husband was in the concrete business. [#3]

The same business owner reported that in the early 1980's, when the economic conditions were not favorable in the art sales industry, she and her husband started the firm by financing it with the sale of her art gallery. [#3]

- The non-Hispanic white male owner of a specialty construction firm said challenges in starting the firm included “name recognition and building up your referrals.” He said the challenge is getting people to give you a chance when they are already using a particular company. [#18]
- The non-Hispanic white male owner of an SBE-certified specialty consulting company reported that “understanding all the rules and regulations of running a business...[and] the types of insurance requirements that you have to have to run a business and work for the different agencies...were kind of challenging.” [#17]
- When asked if he faced any challenges when starting his business, the non-Hispanic white male owner of an SBE-certified specialty consulting company responded, “Marketing myself and trying to figure out where I could start gaining jobs [were challenges].” [#29]
- The non-Hispanic white male owner of an SBE-certified specialty contracting company said that getting to know people in the industry was a barrier to getting started in the business. [#35]
- The Black American female owner of a DBE- and SLBE-certified construction-related business reported that the incorporated name of her business “was not recognized as a construction-related business.” She said that, after struggling to win bids, she needed to consider changing the name of her firm to better identify the scope of her work industry. She added that it was then that she registered for a doing-business-as (DBA) company name and started working under the firm’s current name. [#48]

**Many interviewees reporting facing financial barriers such as cash flow, access to credit, and other factors when they started their business as well as during the years that followed business establishment.** [e.g., PF#2, WT#2] For example:

- The Black American female owner of a construction-related business stated that the biggest challenge to starting and maintaining her company is obtaining funding. She reported having very little cash or other resources to invest at startup, which affected her ability to pursue opportunities, purchase equipment, and fund the day-to-day operations of her business. [#2]
- The Hispanic American male representative of a DBE- and SBE-certified specialty supply firm stated that one of the barriers for small businesses is “establishing credit with material suppliers.” [#11]

- The non-Hispanic white male owners of a construction-related firm explained that, as a new business, obtaining capital is a challenge because “Banks want to see you in business two or three years.” [AV#1]
- The male owner of a specialty construction-related firm reported that lack of cash flow is a “...nightmare created by slow payments.” He therefore recommended that there should be laws to penalize contractors failing to pay subs in a timely manner. [WT#32]
- The non-Hispanic white male owner of a specialty construction firm stated that cash flow is the biggest barrier to doing business. He stated that he is not going to take out a loan of \$60,000 or more to fund a job. He added that he would rather his business stay small than take out a loan. [#37]
- The Hispanic American male owner of a specialty contracting business reported the biggest challenge for his firm is cash flow. He said, “In general with any business, but in particular with a small business, [completing work is] very labor-intensive, so cash flow is extremely critical.” [#9]
- The non-Hispanic white male owners of an engineering firm said, “I gave up trying to get a small business. I just do it on my own and do the best I can. Small companies [and] disabled veterans should be considered a minority in terms of receiving business loans.” [AV#3]
- The Subcontinent Asian American owner of a DBE-certified engineering firm reported that he faced “a lot of challenges in the beginning.... I [did not have an] office. I started [the business] in my garage. [I did not] have any cash flow. [For the first two or] three years, I [kept] looking for small [government jobs, but during that time my] survival was based on my private [work].” [#12]
- The Subcontinent Asian American owner of an architecture and design firm said, “Cash flow is the number one issue for consultant firms, because we have salary to pay, but like all the consultants, we don’t really get paid on time.... The product we put out there is not like a regular business [where] you can sell your product.” He explained that, if his firm is not paid for their work, then he cannot recover some of the expenses by selling the completed plans to someone else. He added that it is not “like I make a pie and [if] nobody buys it, I could...discount [it].” [#6]
- When asked to describe any challenges with starting or running a small business, the Subcontinent Asian American owner of an engineering firm said, “Just the financing obviously. Cash flow is always a concerns, so we’re under-capitalized.” [AV#4]

**Some businesses reported that simply being a minority or woman made starting and growing a business more difficult.** For example:

- The Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm stated that she quickly learned that being a woman in the construction industry is challenging. She said that she went from being a positive, open person to more “hard core,” indicating that she had to become more structured and rigid when negotiating. [#3]
- The Subcontinent Asian American male owner of a MBE-certified professional services firm said, “You get a lot of challenges. The base fundamental challenge is the relationship. When you get [started], you need to get the right people to give you a chance to perform. The right connection in a prime company has more to do with the selection of a DBE than with the expertise. So it’s more...like politics rather than what you could perform or what you can produce.” [#14]
- When asked whether there are specific barriers for minorities and women in the construction industry, the Black American male owner of a DBE-, MBE-, SBE-certified specialty construction firm said, “The bottom line is, [large construction firms] don’t like to share...they’re non-discriminative as far as who it is, whether it’s a man or female, minority, doesn’t matter. They don’t want to share with anyone, period.” [#10]

In regard to the challenges for minority- or woman-owned small businesses, the same business owner added that “the toughest part is...having someone give you a fair shot.” [#10]

- The non-Hispanic white female owner of a WBE-certified specialty construction firm said that, as a woman, she has had to work harder to prove herself. She recalled, “[Potential customers] literally did not want to deal with me and I was kind of a joke out there.” She reported that potential customers laughed at her and said, ‘She won’t last six months.’” She described that she survived by making mistakes, correcting them, and learning from them. [#7]
- The Hispanic American female owner of a MBE-certified specialty services firm said that the hardest part of getting started was proving herself as a woman. She said she was “constantly going out there and having contractors question whether I knew what I was doing or not...[and] always having to prove to [contractors] that yes, I do know what I’m doing...basically, earning my respect out there in the field had to be the hardest thing.” She added, “It was a constant battle...always. There was no room for failure as a woman out there.” [#5]

- The non-Hispanic white female owner of an SBE-certified specialty contracting business indicated that starting her company was a challenge because assistance programs were nonexistent. She said, “It was very hard, being a woman, to get my foot in the door, because it is a man’s world out there. [But] I was persistent and I didn’t give up.” [#24]
- The Black American male owner of a DBE- and SBE-certified construction-related firm reported that his firm did not have enough work at first, and he sought DBE certification to get more work. He said that his friend suggested that if he were “[DBE] certified, maybe [I could] get some work that way.” [#19]
- The Hispanic American female owner of a WBE-, SBE-, and MBE-certified general contracting firm said, “It’s a man’s world...for [potential customers] to take you seriously, you needed to have something to fall back on.” She explained that “something to fall back on” meant bonding capability. She said that customers ask, “So you’re a woman, right? You are starting this business? Well, do you have the bonding and the insurance to take this job?” She went on to explain that “once they knew that I had [bonding and insurance]...they say ‘What’s your experience?’” She added, “...I’m trying to get experience so that you guys can see [that I can do the job]. Without the work, how am I going to prove myself?” [#13]

**Some business representatives did not report challenges for minority- or woman-owned firms in starting or growing their firms.** For example:

- When asked if she is aware of any challenges specific to the firm being a woman-owned business in this industry, the female representative of a CPUC WBE-certified specialty construction firm responded, “Well, there’s a lot of barriers in the market...[but] we haven’t really seen anything woman-owned as far as any barrier.” She said that being woman-owned has been beneficial with regard to obtaining their CPUC WBE certification. [#16]
- When asked if he has experienced disadvantages or barriers as a minority-owned firm, the non-Hispanic white male representative of a Subcontinent Asian American MBE-certified services provider stated, “We really haven’t had any challenges.” [#21]
- The Black American female owner of a construction-related business stated, “I haven’t really started working yet. I’m just getting my certifications now with my WBE....” She added that she does not anticipate any disadvantages or barriers associated with her business being woman-owned. She said, “The good thing about construction is the bid process...the bid process kind of makes everything fair around the board.” [#2]



**Some interviewees reported an easier time of starting a business.** For example:

- When asked about any challenges experienced in breaking into his industry, the non-Hispanic white male owner of a SBE- and DVBE-certified specialty construction firm stated, “Actually, there weren’t any [challenges], and really there weren’t. It was just stupid luck because everybody that builds something...of any size has a parking lot. And [among] parking lot stripers, only one percent of the people in the United States really can start a business and keep it going, because most people have no clue [what they are doing].” [#8]
- The Subcontinent Asian American owner of a DBE-certified transportation services firm reported that he started his business in the mid 2000’s. He added: “I bought a [a piece of equipment] and started [working]. Then I bought another one and another one. It was a coincidence that I went into business.” [#54]
- The non-Hispanic white male owner of an architecture-related consulting firm reported that he started the business “by just getting a couple of projects. That allowed me to afford to be independent, and I worked hard on those projects, and they led to other projects.” [#30]
- The non-Hispanic white male representative of a general contracting firm reported that the company was established when a “couple of guys got together and they had a gravel pit...and they did construction of that pit.” [#26]
- The non-Hispanic white male owner of an SBE-, DVBE-, and SDVOSB-certified consulting firm said, “It’s really simple. I just don’t trust working for somebody.... I never want to get fired.” [#45a]
- When asked if he faced any challenges in starting the business, the owner of a non-Hispanic white male-owned construction-related business replied, “Every business has challenges.... [They] can [be] overcome with patience and knowledge.” [#36]

**One interviewee explained that perceived incentives for WBEs was one factor that encouraged starting those businesses.**

- The non-Hispanic white female owner of a DBE-certified consulting firm commented, “We noticed that there was a lack of woman-owned businesses [in our industry] and [noticed] other businesses were trying to get women to participate...we decided that we should do that.” [#39a]

**Types of work that businesses perform.** Interviewees discussed whether and why over time their firms changed the types of work that they perform.

**Many interviewees indicated that their companies had changed, evolved, or expanded their lines of work to respond to market conditions or to fill an open niche.** [e.g., #7, #8, #9, #10, #16, #17, #21, #23, #24, #32, #34, #35, #39a, #44, #47, #48, #51, #55, #57, #58, #59] For example:

- The Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm stated that they have added services, such as rock drilling. As the company grew, they expanded to saw cutting, retrofitting, and selected demolition. She added that selected demolition is particularly important to Caltrans. The interviewee commented that the firm grew from a “saw cutting” company to a “demolition company” that performs saw cutting. [#3]
- The Black American male owner of a DBE- and SBE-certified contracting firm said that his firm began with residential construction in the private sector but after a few years moved into public works construction contracting. [#61]
- The Black American male owner of a specialty contracting business stated that his company started out with mainly smaller residential jobs. He said, “Now I’ve gone into...larger scale projects as far as the cost of the project.” He added, “...it seems like over the last year, more and more [people have] discovered our company. [We seem to be] progressing towards more of the high-end custom work, but it’s nothing really that I’m pursuing; it’s more been them pursuing us.” [#27]
- The non-Hispanic white male representative of an engineering firm said that their “means and methods” have changed. He said, “[We’ve changed] the way we go about our production work or the way we arrive at our solutions. [We are] a lot more technology oriented, leveraging software, leveraging IT, and leveraging a lot of technology aspects of our business.” [#33]
- The Hispanic American male owner of a specialty construction firm reported that there have been changes in the type of work performed by the firm. He said, “Originally, we worked mainly for other companies. [The other companies] would say, ‘We want this done, this done, and this done....’ We would go in and [do it].” [#4]

The same business owner added that, in order to grow the business, his firm needed more work. Therefore, he stated that they pursued accounts on their own to perform the work directly. He remarked that it helps to “cut out the middle man.” [#4]

- When asked about changes in the types of work the company has performed, the non-Hispanic white male representative of a general contracting firm

stated that the company has expanded. He explained that they “started with small ditch and small road projects, and now we do huge stuff for lots of different things: power, water. It’s all construction-related.” [#26]

- The Hispanic American female owner of a WBE-, SBE-, and MBE-certified general contracting firm reported that she is planning to expand the type of work they can do. She said, “I’m looking into other avenues [of business].... [Types of work that] I have the license for [already].” [#13]
- The Black American male owner of a DBE- and MBE-certified construction business indicated that, in addition to general construction, he is now working in tenant improvements and paving and is expanding into solar. [#60]

**One business owner reported that location was a reason for changing the type of work his business performs.**

- The non-Hispanic white male owner of a specialty construction firm reported, “We recognized that if you’re going to remain as a [particular type of] company, then you probably have to travel far from your base. The other alternative for us was staying close to our base [by focusing on a different set of services].” The owner stated that his firm transitioned to services that allowed them to travel less. He added that they have since added additional related services. [#18]

**Many businesses reported that there has been little or no change in the type of work they do.** [e.g., #5, #6, #9, #11, #15, #19, #20, #22, #25, #28, #29, #30, #36, #37, #38, #40, #42, 45a, #46a, #50, #53, #54, #56] For example:

- The Subcontinent Asian American male owner of a MBE-certified professional services firm reported that his firm has not changed. He said, “No, not changed because basically, I’ve been working as [a] Caltrans consultant [for several decades].... I’ve been doing the same kind of work. It is my advantage because I am doing the same kind of work, that is where my strength and forte is, right? So I’ll be able to survive because of that.” [#14]

**Employment size of businesses.** The study team asked business owners about the number of people that they employed and if their employment size fluctuated.

**A number of companies reported that they expand and contract their employment size depending on work opportunities or market conditions. Some reported plans to expand.** [e.g., #5, #8, #9, #13, #14, #17, #18, #21, #23, #28, #29, #32, #33, #34, #39a, #42, #45a, #47, #48, #50, #53, #54, #56, #57, #58] For example:

- The Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm said that the size of the firm was steady for many years; but, over the last twenty-four months, it “has doubled in size.” [#3]

- The female owner of a DBE- and WBE-certified construction firm reported that she has hired five or six employees this year. Her new employees are from her “circle.” She reported hiring and training her daughter’s swim coach for a marketing position, and a dog groomer who she trained to do “take-offs on soldier pile walls.” [PF#16]
- The non-Hispanic white male owner of an architecture-related consulting firm noted that the size of the firm has changed over the years. They started out with one or two people and grew to about twelve people. He added that later the firm downsized again to about seven employees. [#30]
- The Hispanic American male owner of a specialty construction firm reported that the firm originally consisted of five employees and one truck. He said, “At one point the firm got up to the level where we had more than twenty employees split into two crews, but that was difficult to control.” He remarked that the firm now has consistent staffing of ten to fifteen employees. [#4]
- When asked if his firm has changed size over time, the Black American male owner of an MBE-certified contracting firm reported that, as a business that focuses on construction management, “Instead of me growing the firm, I put together a team so I have the capacity to do a project.” [#15]
- The non-Hispanic white male representative of a general contracting firm indicated that the company has grown in size from a few employees to thousands. [#26]
- The non-Hispanic white male owner of a specialty contracting business reported that the size of his company “fluctuates, because I want to have a hundred percent quality [and] finding good people is difficult.” [#31]
- The non-Hispanic white male owner of a concrete inspection agency noted that he has observed growth over the years and picked up quite a few clients since his start in 2000, including six agencies. [#59]

**Some Interviewees reported that their firm changes size seasonally.** For example:

- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm noted that the seasonal nature of the business does play a part in the company’s growth. He said, “When construction in California comes to a halt, it comes to a screeching halt.” [#10]
- The Black American male owner of a specialty contracting business reported that “everything [has] steadily improved every single year.” He said, “I started out just by myself and then had one employee, and every year I’ve [added a] couple more guys...almost every year.” [#27]

The same business owner remarked that his business is: “very seasonal. [During the winter] I still usually have work on the books, but we just can’t do it because of the rain.” [#27]

**Some interviewees said that they had reduced permanent staff or frozen hiring because of the economic downturn, poor market conditions, or high overhead.** For example:

- The female representative of a CPUC WBE-certified specialty construction firm said, “There was, at a time where we had more than 50 employees. Now we’ve steadily had [around 30]. We’re down [a few more], because we just had some layoffs, but we’ve been at [around 30 employees] for the last couple years, which is the lowest that we had been.” [#16]
- The Hispanic American male owner of a specialty contracting company stated that he has employed up to 40 people but decided to downsize due to overhead costs. He said, “I cut down to 15 [workers]...but can go up to 20 on a big job.” He stated that he maintains a pool of workers for larger projects, but his core employees are always himself and two employees. [#40]
- The non-Hispanic white female owner of a WBE-, SBE-, and DBE-certified specialty construction firm reported, “We got really big really fast.” She said, “It was a little overwhelming and it was incredibly hard having two kids in school and separate schedules. [We] decided to shrink back down, which was our original model. Our original model was that we would pull people from the [union] hall and be able to shrink and grow whenever we need to.” [#22]
- The non-Hispanic white male owner of a specialty contracting company commented, “The company got big in the early 90’s...then when the [economic] downturn came, I let the employees go and just sold my equipment and kept [just a few pieces]...that’s where I’m at now.” [#51]
- The non-Hispanic white female representative of a general contracting company said that when the business started they employed several hundred people. She noted, however, that the current business climate does not require them to employ such a large staff. The firm now engages outside consultants to fulfill the staff requirement for their projects. [#43]
- The Native American male owner of a DBE-certified construction-related firm stated that his firm diminished in size following the economic downturn. [#49]

**Other business owners reported little or no change in the size of the firm.** [e.g., #12, #20, #24, #25, #38, #55] For example:

- The Black American male owner of a DBE- and SBE-certified contracting firm reported that his firm has not grown. He said, “I would have to say no, unfortunately.” [#61]

- The non-Hispanic white male owner of an SBE-certified consulting company said that his firm fluctuates between three and four employees at any given time. [#44]

**Ability of businesses to perform different types and sizes of contracts.** Interviewees discussed types, locations of, and sizes of contracts that their firms perform.

**Some interviewees reported barriers such as bonding, cash flow, staffing and other factors that affected their decisions to pursue specific types of work.** For example:

- When asked if his company has grown over time, the non-Hispanic white male owner of a specialty construction firm said that he would take on bigger jobs, but in California contracting it takes 60 to 100 days to be paid and that makes it difficult to survive and grow. His firm only does residential work now because residential property owners will pay in a timely manner. [#37]

The same business owner stated that when he was younger he was full of “gumption,” and he would not say no to anything. He went on to say that he was a “little naïve,” and sometimes he would not know what he was getting himself into when bidding on bigger contracts. He added that growing too fast in the beginning is sometimes bad because you do not know what you are getting yourself into with the scope of work or the insurance involved. He added that, after those early experiences, his firm made the decision not to bid on big contracts anymore. [#37]

- The Hispanic American female owner of a WBE-, SBE-, and MBE-certified general contracting firm stated that bonding requirements are limiting the size of the contracts her firm can undertake. [#13]
- The Hispanic American male owner of a specialty contracting business said that the capital his firm has on hand, and thus the size of bond they can obtain, limits their size of contracts. He said, “[We’re limited] just based on bond ability, based on our current assets that we’ve got. And then, obviously, just our ability to manage the cash flow that it takes to be able to take on a project on a large scale. Then [cash flow] becomes of critical importance.” [#9]
- Regarding limitations on the size of the contracts they pursue, the non-Hispanic white male owner of an SBE-certified specialty consulting company stated that his firm is limited in its ability to pursue “big projects because...we don’t have the manpower....” [#29]
- The Hispanic American male owner of a specialty construction firm indicated that the firm has limits to the size of contracts that they can perform based on the bonding requirements of the project. [#4]

**Some firm owners indicated that their companies perform both small and large contracts.**

For example:

- When asked if there are any limits on the size of contracts her firm performs, the Hispanic American female owner of a MBE-certified specialty services firm, responded, “No, when it comes to [our field], we have no limits.” She added, “There’ve been times where I feel like I’m in over my head, but that’s when I have to make it work. Which means I have to go out and purchase another truck so that we can fulfill the contract.” She commented, “... so far we haven’t had to turn anyone down, or turn any contracts down.” [#5]
- When asked if there is a limit to the size of contracts they pursue, the Black American male owner of an MBE-certified contracting firm stated that he asks his client, “...‘You tell us what you [want]’, because I’ve been in this business for 30 years, and through...my network, I don’t care what you want to get done, I can help you.” [#15]

**Some firms reported setting a ceiling on project size, finding their comfort zone, and sticking to it.** [e.g., #28, #32, #34, #40] For example:

- The Subcontinent Asian American male owner of an architecture and design firm reported, “There’s a cap [on the amount of work we can do]. There is a limit to my license, but we have not really turned down any contracts. Potential clients know what we can do, so we are rarely approached with work we cannot do [contracts that are larger than his license allows him to perform].” [#6]
- The non-Hispanic white male owner of an SBE-certified specialty consulting company explained that they are not competitive on the very large jobs typically awarded to the large engineering firms. He said, “I don’t pursue the [large jobs]. I think probably the biggest contracts I’ve taken on are up to \$2 million.” [#17]

**Some interviewees reported not setting strict limits or facing challenges with size of contracts.**

- The non-Hispanic white female owner of a WBE-certified specialty construction firm reported that they do not have a strict limit to the size of contracts they perform but said, “We don’t take million dollar contracts, but we take \$100,000.” [#7]
- The female representative of a CPUC WBE-certified specialty construction firm reported, “We pretty much take any size and duration to a point. We probably couldn’t do the very, very large jobs.” [#16]

- When asked if there are limits to the size of contract his firm can undertake, the non-Hispanic white male representative of an engineering firm reported that his firm has considerable range. His firm has worked on multi-million-dollar design fee projects across multiple years as well as \$1,000 contracts. [#33]

**Local effects of the economic downturn.** Many interviewees shared comments about their experiences with the barriers and challenges associated with the economic downturn. Some described financial and property losses. [e.g., #13, #15, #17, #32] For example:

- The non-Hispanic white male representative of an SBE-certified engineering firm reported that his firm experienced a significant downturn in business in 2007 and 2008. He said that they are very susceptible to downturns in the economy explaining, “Oil here is big, [but] that’s taken a downturn. The downturn in the housing market obviously affected us greatly, as there were far fewer new housing developments, which meant fewer traffic engineering projects. That was significant; we had to cut our staff twenty percent.” [#28]
- The Subcontinent Asian American female representative of a minority woman-owned DBE-certified supply firm said, “The economy did hit us pretty hard.... There were a couple of firms that got really far behind in paying.” She added that friends helped the firm so they were able to stay in business. She said, “...It’s 2016 now; it took about five years to pay those people [back].” [#56]
- The Subcontinent Asian American male owner of a MBE-certified professional services firm commented that his firm experienced effects of the economic downturn. He said, “In a way, because...our job depends on Caltrans budget.” He stated, “Like these two years...Caltrans cut down on projects so they do not need consultants. Then, besides Caltrans...[there’s] not enough work to go around, so they do not need the main consultants. So when [Caltrans] cuts [funding for] the consultants...we suffer.” [#14]
- The non-Hispanic white male owner of a specialty construction firm stated that, during the economic downturn, he maintained his contracting license but had to work for another company. [#37]
- The non-Hispanic white female owner of a DBE-certified consulting firm commented, “[The economic downturn] was terrible. It got very, very, very slow. Those clients that were still around became very slow in paying to the point that I actually sought out [a] job in the public sector again.” [#55]
- The non-Hispanic white female owner of a DBE-, SBE-, and WBE-certified specialty contracting company reported that her work has slowed down a lot due to the economic downturn. [#38]



- The Black American representative of a minority trade organization reported that his organization had once had more than 70 members but “after the recession, we had [about 25 members]. A lot of it just went under.” [#52]

The same representative said that the economic downturn had been hard for his organization’s members. He said, “It’s affected them the most in the negative sense.” [#52]

- The non-Hispanic white female owner of a WBE-, SBE- and DBE-certified specialty construction firm stated, “I have no idea how I survived. That was incredibly hard.” She said, “I had to borrow a lot of money, and I owed a lot of money because [the prime contractors] didn’t pay me...it’s taken me almost five years to pay everybody off.” [#22]
- The Black American male owner of a DBE-, MBE-, and CPUC-certified specialty construction firm stated, “To those of us in the industry...we called it the Great Recession.” He went on to say, “[The downturn] was a Great Recession for a reason...and some companies are recovering.” He commented that the economic downturn created a deep impact throughout the industry by companies downsizing and others who went out of business. [#47]
- The Native American male owner of a DBE-certified construction-related firm reported that he was “hit so hard I had to go on unemployment.” He also stated that he had to use his equity line of credit and other assets to stay afloat during this time. [#49]
- The non-Hispanic white male owner of an SBE-, DVBE-, and SDVOSB-certified consulting firm said, “It was devastating.” He added, “Ever since Obama was elected, it’s just gone down and down and down. We were building up to almost seven million dollars; now we are down to three, three-and-a-half a year.” [#45a]

The same business owner reported, “We decided the best way to get through a recession is to do a good job. Keep a good reputation, because there will be a couple of survivors as clients, and they will stick with you. In other words, just do your best all the time.” [#45a]

- The female owner of a WBE-certified transportation firm said that the economic downturn affected her firm explaining, “We had more [trucks], but we had to sell them because of the economy.” [#34]
- The non-Hispanic white female representative of a general contracting company said, “Projects became stalled or even nonexistent.... [Projects] were on the books, but funding could not be secured so the projects just totally stopped.” [#43]

The same business representative reported said, “The economic downturn made it very difficult for us to get bonding.” She stated that the only way she could get the bonding levels required for large projects was to joint venture with larger firms. She added, “We were hit very hard.” [#43]

- The owner of a non-Hispanic white male-owned construction-related business explained that when some of his customers closed shop, it impacted his firm. He said that he was only able to survive because his pricing and overhead is lower than that of his competitors. [#36]
- The non-Hispanic white female owner of an SBE-certified specialty contracting business stated, “It was tough...we’ve been through about four severe downturns, and each time you have to...tighten your belt loop. [You] have to cut back on your expenses and...you have to figure out ways to go out and get that customer. [When the] phone quits ringing, you have to go out and figure out ways to get that business.... [We did that by] cutting back on expenses. We couldn’t expand and get new equipment.” [#24]
- Regarding the economic downturn, the Black American owner of a specialty contracting business stated, “At the beginning my business was...just starting to get off the ground and starting to pick up a little bit of steam.” He reported that the recession “stopped everything and pretty much sent me back to square one.” [#27]
- The Black American male owner of an MBE-certified trucking firm said, “Work was slow. I was still a new company...[and could] feel the pressure of being a small business and a business owner, but what helped me out was I had very little overhead.” [#25]
- The non-Hispanic white male owner of an SBE-certified specialty contracting company stated that “just finding work and getting work” was difficult during the economic downturn. He said that he had to travel farther and expand the number of services his firm offered in order to stay busy. [#35]
- The non-Hispanic white male owner of a specialty contracting company reported that during the economic downturn he downsized the company and sold much of his equipment because there was no work available. [#51]
- The non-Hispanic white male representative of an engineering firm said that going forward, the economic downturn has taught them to be cautious in the markets they pursue. He added that his firm shrank to approximately half of its former size during the economic downturn. [#33]
- The non-Hispanic white male representative of a general contracting company said that, in public works, the economic downturn meant that there were fewer dollars available for infrastructure projects. He said that when this happens “competition goes up and [profit] margins go down.” [#41]

- The non-Hispanic white male owner of an SBE-certified consulting company stated that the economic downturn led to “the birth” of his company and that being a startup during the economic downturn was difficult. [#44]
- The Black American female owner of a DBE- and SLBE-certified construction-related business reported that her firm began during the economic downturn. She stated, “I moved to Southern California after losing my home in a gated community. When I moved here, I had nothing. I started my company, but it was not gaining traction. I had to reorganize to better position my company for work with agencies and huge construction companies. I took the economic downturn to begin networking to let people know who I was.” [#48]
- The Native American male owner of a DVBE-certified transportation firm stated that the effects of the economic downturn “did hurt my company because some bids were won, but were scrapped because the agency did not have the funding.” He added, “That’s why you got to be diversified. You got to try new things.” [#57]
- The non-Hispanic white male owner of a concrete inspection agency reflected that he had experienced slow business around 2008. He commented, “It affected us the first year for a little bit. But we’ve been pretty fortunate on staying busy throughout the years.” [59]
- The Black American male owner of a DBE- and MBE-certified construction business reported that the economic downturn negatively impacted his company explaining that things were so bad that he filed bankruptcy. [#60]

**Some interviewees indicated that market conditions since 2008 have made it difficult to stay in business.** For example:

- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm reported that the economic downturn affected newer small businesses by the reduction of public work because they are less able to obtain work in the private sector. He pointed out that when the number of “state-funded projects slow down then there’s nothing left but private sector work.” He added that “to work in [the] private sector is very, very, very difficult, because that is really a network of close-knit people that have worked together for years, and they’re not...going to take anything from any outsiders.... They’re not going to use you; they’re just not.” [#10]
- The non-Hispanic white female owner of a WBE-certified specialty construction firm reported, “When we got the new president [President Barack Obama], things went into the toilet.” When asked to elaborate, she commented that the lack of funding for the type of jobs her firm performs caused barriers. [#7]

- The president of a DBE-, SBE-, and MBE-certified engineering and construction firm said that his business “has been hit hard by the so called Great Recession. The work we can do has been going to large engineering firms....” [WT#11]
- The non-Hispanic white male representative of a general contracting firm reported that the economic downturn “knocked out about 60 percent of our work in California.” [#26]
- The non-Hispanic white male owner of an engineering firm reported that the size of the firm reduced during the years of 2007 through 2013 due to the economic downturn. [#42]

The same business owner indicated that during the economic downturn the building industry “just went away.... There was none.” He said, “When the residential [projects] went away, the commercial [projects] went with it.” [#42]

- The non-Hispanic white male owner of a specialty contracting company said that, in the current economy, business is “kind of spotty.” He also said his plan has been to close the business and move out of the area but that move has not occurred yet. [#51]

**A few business owners and managers said that their companies did not see a decline in work, and some reported that they actually became more profitable during the economic downturn.** [e.g., #12, #50, #53, #58] For example:

- The Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm reported that during the most recent recession her firm was fortunate to be working on a very large project with a large general contractor. [#3]

The same business owner added that the firm has been consistently busy and that they attribute this to the diversity of their services. She also stated that they were “highly dependent on public works projects and Caltrans work” to take them through the most recent recession. [#3]

- The Hispanic American male owner of a specialty contracting company reported that his business did not experience any negative effects from the economic downturn. Rather, he said, “I made more money.” [#40]
- The Subcontinent Asian American male owner of a DBE-certified transportation services firm stated, “Actually, the last recession was good to me. We did good business in the last recession.” [#54]
- The Hispanic American male representative of a DBE- and SBE-certified specialty supply firm reported, “We were able to weather [the economic downturn.] Fortunately, all the equipment [the firm] owns outright. [The

owner] put some of his money back into the business...to keep it going until better times. But it still...hasn't been fully repaid." [#11]

- The Hispanic American male owner of a specialty construction firm said that the risks of an economic downturn are present all the time. He reported that during the economic downturn in 2007, they downsized to seven employees and continued to find work. He added that the firm became more profitable during the economic downturn by downsizing through salary cuts and a rent reduction. [#4]
- The Hispanic American male owner of a specialty contracting business reported that his firm was "born in the recession...[the recession] created us, and we filled a void in the market.... And we were fortunate enough to be able to capitalize on that opportunity." [#9]
- The non-Hispanic white male owner of an architecture-related consulting firm indicated that he did not feel any effects of the economic downturn. He reported that the firm had a few projects and was really just starting. He said, "Unlike other firms that had to let 50 people go and had to downsize immediately, we didn't...." [#30]
- The Subcontinent Asian American owner of an architecture and design firm reported that his firm is unique because they have another location in another country. He said that when the California economy went down, the market for projects in the other country was good. He said that the other country was important because they had large, long-term projects that sustained them through the California downturn. [#6]
- The Hispanic American male representative of a DBE- and SBE-certified woman-owned engineering firm said the company fared okay during the economic downturn. He said they "really buckled down [and] cut all the costs and the overhead." [#23]
- The non-Hispanic white female owner of an SBE-certified specialty consulting company said that her firm did not have much private sector work during the economic downturn "but we had agency work to do. Because [we are] small, it does not take much to keep us busy. We just need a couple projects and that keeps us going." [#20]
- The non-Hispanic white male owner of an SBE-certified specialty consulting company spoke about his approach to surviving economic downturns saying, "Our business model is to focus on complicated [projects], the ones that nobody wants to touch." He added that specialty work helps them to survive during poor economic conditions. [#29]
- The non-Hispanic white female owner of a DBE-certified consulting firm reported no impact by the economic downturn because she works in a niche

market. She added, “We’ve struggled a little bit, and the company’s bank struggled a little bit in ‘09.... Luckily, we had other contracts.... That pushed us through.” [#39a]

- The Hispanic American male owner of a DBE- and MBE-certified specialty contracting company reported that the economic downturn did not greatly affect his firm because his firm deals with long-term contracts. He explained, “If we get a job, the job is not a very big job but it stretches out over one, two, or three years.” [#46a]

**Current economic conditions.** Many interviewees spoke about how the current economy affects their business.

**Some interviewees reported that they have not yet seen an upswing in market conditions, the recovery has not occurred, or that conditions are worse than before the Great Recession.** For example:

- The non-Hispanic white female owner of a DBE-, SBE-, and WBE-certified specialty-contracting firm commented that the current economy is “slow right this minute. There’s no agency work out to bid right now to speak of.” She added, “Everybody told all the contractors that the agency wasn’t releasing anything because they were waiting for the Feds to approve the highway bill. So finally, [Federal government] just did that. So we’re hoping that will loosen the strings.” [#38]
- The Black American male representative of a minority trade organization reported, “As it relates to our organization? They are horrible! The current economy and market conditions, they’re horrible!” [#52]
- The Hispanic American male owner of a specialty construction firm reported that one challenge for his firm is that the firm tends to lose business when the economy is good because the unions hire more people by offering benefits. He added that when they lose people, they lose capacity to do the work. [#4]
- The Subcontinent Asian American male owner of a DBE-certified transportation services firm commented, “Now it’s slowing down a little, because I think the economy is going to go down pretty soon. However, I am bigger now...so, in the current economy, my business situation is different.” [#54]
- The Black American male owner of a DBE- and SBE-certified contracting firm commented that is hard to say what the effects of the current economy are on his firm. He stated, “It’s hard to tell you right now at this point in time. We are going into a new year and working, so things are just getting started.” [#61]
- The non-Hispanic white female owner of an SBE-certified specialty consulting company stated that her firm gets “a lot of private [sector] calls. [It is] a little

harder to manage [multiple smaller projects rather than one bigger project]. [We are] going somewhere new almost every day.... It's a lot more work to schedule it, estimate it, bill them." [#20]

- Regarding the current economy, the Black American male owner of an MBE-certified contracting firm said, "...to keep the doors open and stay in business and meet the payroll and all that, it's tough. The economy's tough right now." [#15]
- The non-Hispanic white male representative of a general contracting company stated that, from his perspective, the economy is still not good. He said that profit margins are still low, adding: "We see [the current economy] as an owner's market...not a contractor's market." [#41]
- The non-Hispanic white male representative of a DBE-certified consulting firm commented that the economy is cyclical. He stated, "Well, it's kind of interesting. [The economy is] a little bit cyclical...you can see the same thing again; it's like a sin curve....You can almost put what we did in '98 to what we did in 2008 to what we're doing in 2014, it looks the same almost." He added, "...It's just funny.... You always think that [business is] going to take off in January but [it] always take a little bit of time." [#39b]

**Some business owners and managers said that they are experiencing more competition in their industry.** For example:

- When asked about the current economy, the Hispanic American male representative of a DBE- and SBE-certified woman-owned engineering firm reported that the company "is doing fine," but added that they are "finding a lot more competition these days." [#23]
- The non-Hispanic white male owner of an SBE-certified consulting company reported, "The current economy is very competitive." He added, "It is tough to be a small business, especially for those large public contracts." [#44]
- The non-Hispanic white male owner of a specialty construction firm said, "Construction is very up and down with the economy." [#18]

**Most interviewees commented that market conditions have improved or that their firms are doing well.** [e.g., #25, #32, #40, #42, #46a, #50, #56, #59] For example:

- The non-Hispanic white male owner of a specialty construction firm stated that he feels that the economy is "steady, not great, but steady." [#37]
- The Hispanic American female owner of a specialty construction firm commented that the current economy is improving and that she expects to see "greater returns" in this economy. [#58]

- The Native American male owner of a DVBE-certified transportation firm commented that the current economy is “the reason why I’ve added another service to my business line.” He added, “I have to do different things to stay afloat.” He clarified, however, that his business is “not bad. I’m not going to say that; it’s better than it was when I started.” [insert interviewee #]
- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm reported that the economy has “been going pretty well for the last, six years, and seven years.” He stated, “Worldwide, people have a lot of money.... If people have money, they’re spending it.” He added, “...that means there is more construction work that needs doing.” [#10]
- The Native American male owner of a DBE-certified construction-related firm said that over the past two years he has been “able to get his business back on track.” He stated that his salary is low, but business income and profits are good. He said that he is not optimistic about the future of the economy but reported that he is looking to broaden his client base. [#49]
- The non-Hispanic white female owner of a DBE-certified consulting firm commented, “I’ve actually expanded my client base to include a lot of public agencies, small ones. Actually, that part of my business is growing quite a lot, which is helping me to stay very busy.” [#55]
- The Hispanic American male representative of a DBE- and SBE-certified specialty supply firm said of the company’s current economic conditions, “We’re doing well.... Every four to five years it seems like there’s a cycle that [the economy] goes through, and it rebounds.” [#11]
- The Black American female owner of a construction-related business said she believes that economic conditions are generally favorable to her industry, given that public construction projects and private commercial development requires her support services. [#2]
- When asked if the company is now doing well under the current economy, the non-Hispanic white male owner of an SBE-certified specialty contracting company responded, “We’re surviving.” [#35]
- The Black American male owner of a DBE-, MBE-, and CPUC-certified specialty construction firm said, “[The economy] has gotten strong in the last two years.” He said he is seeing more bidding opportunities for the type of work his company performs. [#47]
- The Hispanic American female owner of a MBE-certified specialty services firm said that current market conditions are favorable except for the issue of slow pay. [#5]



- The non-Hispanic white male representative of a DBE-certified construction-related firm commented that the amount of work available “is definitely driven by the economy,” but he said that the current economy is not having any particular negative or positive effects on his firm. [#53]
- A Subcontinent Asian American owner of an architecture and design firm who previously reported that his firm had to rely on out-of-country work during the economic downturn reported that since the current construction market in the other country has slowed, they need to look in the United States for their opportunities. Now they are relying on the California market. The sizes of the projects are smaller; and, he noted, “It doesn’t necessarily increase income, but we’re definitely busier.” [#6]

The same business owner added, “The [California] economy is back on track, but it is still not good or hot enough for consultant firms.” He said, “We’ve been spoiled by the...market conditions [where our other office is].” He said that the “local market is picking up, but we are still struggling.” [#6]

- The non-Hispanic white female owner of an SBE-certified specialty contracting business indicated that the economy is doing “really well.” She said that the economy is cyclical. “Every six to seven years [the economy] starts to go down again. [We are] not quite at the peak yet, but I see the next two to three years being really profitable.” [#24]
- The non-Hispanic white female representative of a general contracting company reported, “We are doing really well.” She added that, because of her firm’s experiences during the economic downturn, the firm now views it as more important to have funding secured before projects can move forward. [#43]
- When asked about the current economy, the non-Hispanic white male representative of a general contracting firm stated, “I think we’re pretty conservative about...having too much optimism. But I think business is going better.” [#26]
- The non-Hispanic white male owner of an architecture-related consulting firm commented, “We [are] able to grow with the...restoration of the economy.” [#30]
- The non-Hispanic white male owner of an SBE-certified consulting company reported previously that competition in the current marketplace has increased. He also reported that the economy is turning around, and his firm submits more proposals. He said, “The phone is ringing...times are getting better, but it hasn’t really had a full swing.” [#44]

The same business owner reported that, as the economy improves, projects that halted during the economic downturn are starting up again. He said “a lot

of those [projects] were designed a decade ago and then shelved, and now [they are] finally coming back to life.” [#44]

- The non-Hispanic white male owner of an SBE-, DVBE-, and SDVOSB-certified consulting firm reported, “We’re keeping our head above water.... I am catching up on some of the debts that I’ve owed.” [#45a]
- The Black American male owner of a DBE- and MBE-certified construction business commented that the effects of the current economy are good. He added that he has bonding now, with a certain bonding limit, and that puts him in a different arena to do business. [#60]

**Business owners’ experiences pursuing public- and private-sector work.** Interviewees discussed their experiences with the pursuit of public- and private-sector work.

**Many interviewees indicated that their firms conduct both public sector and private sector work.** [e.g., #4, #5, #9, #16, #17, #18, #20, #24, #25, #29, #32, #34, #36, #39a, #40, #42, #45a, #47, #51, #52, #53, #56, #58, #60, #61] One business is new and plans to work in both sectors. [e.g., #2]

- The non-Hispanic white male owner of an SBE-certified specialty contracting company indicated that his firm performs both public and private work. He said that his firm works “anywhere that’s close, [because] I try to stay within a 100-mile radius of my home.” [#35]

**Business representatives commented that their firm performs in both sectors, but differently in each.**

- The non-Hispanic white male representative of an engineering firm said, “We do both.” He clarified that their local California office deals primarily with private sector clients, but that offices in other states focus more on public work. [#33]
- The female owner of a WBE-certified transportation firm said that her firm primarily performs private sector work as a prime. She added, “I do work for [a public agency], but as a subcontractor.” [#34]

**Some business owners reported multiple reasons for their desire to work more in the public sector than private sector.** For example:

- The non-Hispanic white male owner of a specialty construction firm stated that, while he currently works in the private sector, he would like to work in the public sector. He explained that public works are more concerned with high-quality work than about cost, but they involve more paperwork as well. He added that there is more money in working with the public sector. [#37]

- The Black American female owner of a DBE- and SLBE-certified construction-related business said that her firm prefers to work in the public sector, because construction contractors “have to pay workers a prevailing wage.” She added that the private sector is “saturated with people and is cut throat.” She continued that there is no regulation of wages in the private sector; and, therefore, it would be difficult for her business to survive. [#48]
- The Black American male owner of a specialty contracting business, who reported working more in the private sector, said, “...if I could pursue more government [work], I would.” [#27]
- The Black American male owner of an MBE-certified contracting firm stated, “I’m mainly focusing on public sector work, because that’s where there a lot of these contracts that require [subcontracting] goals be met, whether it be DBE or a small business or a minority-owned business...I want to be able to go in and help the prime. But at the same time, by teaming with some [other contractors], we can go and get the work and help meet that goal.” He added, “But then, I also do private work.” [#15]
- Regarding his preference for public sector projects, the non-Hispanic white male owner of an SBE-certified specialty consulting company reported, “...because...you’re working with professionals, where working in private sector, sometimes you’re not working with professionals, because the developers and such that are paying you don’t understand everything that’s going on.” [#17]
- The non-Hispanic white female owner of a DBE-certified consulting firm reported that the public sector is easier to work with because the clients have previous experience with construction projects. She commented, “[The] public sector is more understanding, because they have a little background.” [#39a]

**Many business owners focused on cash flow and timely payments as factors related to their preferences in working in the public sector.** [e.g., #12, #13, #16, #19, #22, #28, #31, #44, #46a, #56, #57, #60, #61]. For example:

- The Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm stated that eighty-five percent of their revenue is from public works projects, and most of the rest is private utility work. She added that her preference for public sector work is because of “guaranteed payment. The [public sector] client has money.” She added that other reasons she prefers public sector work are guarantees against the prime declaring bankruptcy, becoming insolvent, or not honoring their financial commitments. [#3]
- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm reported that he very seldom performs private work. He reported, “It’s still good ol’ boy’s network, and that’s the toughest thing...and if

there isn't someone standing over these guys saying that [they] have to make sure you include everybody in this deal they're not going to do it. I mean, they just won't." [#10]

- The Hispanic American male representative of a DBE- and SBE-certified specialty supply firm reported that his firm prefers working in the public sector. He said that with public work, "We don't have [the] possibility of that private job going out of business and not getting paid. [With public work] we know that...we can get paid for the projects.... We know with Caltrans that [we're] pretty much guaranteed to get paid." [#11]
- The non-Hispanic white male owner of an engineering firm reported that he does not have a preference between the two sectors. However, he explained that in the public sector, payments are on time; but, in the private sector, "you are chasing your money all the time." [#42]
- The non-Hispanic white male representative of a Subcontinent Asian American MBE-certified services provider stated that his firm does very little work with any public agency. He said he is trying "to work with the city to get more secure business coming in." [#21]

**Some business owners expressed other reasons for their preferences for public sector work, including contracting goal requirements, bidding processes, and other factors.** For example:

- The non-Hispanic white female owner of a WBE-certified specialty construction firm reported that her company performs mostly public sector work, primarily for cities. She reported that the reason they pursue public sector work is that the cities and counties are required to use "a certain percentage" of minority- or woman-owned firms and "that does help." [#7]
- In describing the reason for her preference towards public sector work, the Hispanic American female owner of a MBE-certified specialty services firm said, "[Public sector work has] always been easier as far as the bidding goes...and most of the [prime] contractors that we have [frequent interaction with], do the state bidding.... We kind of follow the Caltrans manuals. I know exactly what's expected." [#5]
- The Hispanic American male representative of a DBE- and SBE-certified woman-owned engineering firm reported that the company mostly performs public sector work. He said they focus on public work because of "our reputation and our owner. She's really well-known [with] all the public agencies, so people ask for her." He said it "was a little hard [to perform both public and private] just from [a] staffing standpoint." [#23]
- The female representative of a CPUC WBE-certified specialty construction firm said that her firm does not have the same disputes over scope of work in the public sector that they have with private sector clients. [#16]

- The non-Hispanic white female owner of an SBE-certified specialty contracting business commented, “I’d love to get more public work projects. [Public sector projects] are more long-term. It takes more paperwork, but one of the main reasons is I like to keep my employees happy, and they like it when they get a big paycheck.” [#24]
- The non-Hispanic white male representative of a general contracting firm reported that his firm works mostly in the public sector. He added, however, that during the economic downturn, “It was probably 50/50.” [#26]
- The non-Hispanic white male owner of an architecture-related consulting firm reported that his firm performs more work that is public. He said, “Our preference is to do all public work. If we could wave a magic wand, we would only be doing public [work].” [#30]

The same business owner said that he prefers public work because the whole community “experiences public space and deserves good design.” He said, “It’s about designing spaces that have a maximum amount of exposure to living things.” [#30]

- The Black American representative of a minority trade organization said, “A project that’s public has so many stringent requirements for local participation. A contractor going in would be crazy not to follow [those requirements]. In other words, if there is legislation, there are requirements, provisions, and laws are in place.” [#52]

The same representative said that, in contrast to the well-regulated public sector, “the private sector has not done anything right. But if the local politician says, work with these guys...that’s what [the private sector contractors] do.” He noted that “in the early days, we did not have a lot of relationships with the politicians to advocate for our [members’ private sector] participation.” [#52]

- When asked whether his firm primarily performs public or private sector work, the Subcontinent Asian American male owner of a MBE-certified professional services firm responded, “Public sector, because basically what I do is Caltrans work because my experience is Caltrans-centered.” He added, “Everything is Caltrans, even the design...even when you do [other agency] work...everything is based on Caltrans procedure and standards.” [#14]

**Some interviewees reported that they preferred private sector work to the public sector, or said that there are benefits to private sector work.** Some of the comments indicated that performing private sector contracts was easier, more profitable, and more straightforward than performing public sector contracts. [e.g., #43, #53, #54] For example:

- The non-Hispanic white male owner of a SBE- and DVBE-certified specialty construction firm stated that his firm mostly works in the private sector, saying, “We probably do 90 percent private work.” [#8]

The same business owner stated that the cost of working in the public sector was too high. He explained, saying “I’ve always done work on private property.... Every once in a while I don’t get paid, but the amount of money I lose is not the dollar amount of the job. What I lose is how much money I paid [for] my labor and my materials.... It’s easy to absorb.” [#8]

- The Hispanic American female owner of a specialty construction firm reported that her preference is to work in the private sector because “...it’s just less paper work.” [#58]
- The non-Hispanic white male owner of a specialty contracting company stated that he prefers private sector work because there are fewer requirements to get the work, and the turn-around time for payments is faster. In addition, he stated, “In the public sector, [customers] are over concerned about safety...you can’t be too overly concerned about safety...not from one extreme to another.” [#51]
- The Native American male owner of a DBE-certified construction-related firm stated that the private sector has fewer regulations and restrictions. He noted that relationships in the private sector are more personal with customers but added, “You don’t make the same kind of money.” [#49]
- The non-Hispanic white male owner of an SBE-, DVBE-, and SDVOSB-certified consulting firm noted that when working in the private sector, “Money is very quick and big.... When they need services, they will pay anything to get it and they pay very quickly.” [#45a]
- When asked about experience with private sector work, the Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm said that there is a benefit because “the private guy will go COD (Cash on Delivery) with us, but the public guy will never do that.” [#3]
- The non-Hispanic white female owner of a DBE-certified consulting firm commented, “In the private sector, you are more creative with solutions, and people are much more open to them. In the public sector, not so much. If we have never done [something a particular way] before, door closed. If you think outside of the box in the private sector, you can also get that idea to move forward and you can get some really interesting projects and some really cool projects.... Whereas, you would not within the public sector.” [#55]
- The Hispanic American male owner of a specialty construction firm said that the reason that his firm prefers private sector work is that “it’s just way easier.” He added, “I do a job [in the private sector]...we’ll get paid in fifteen

days, thirty ....” He added, “When you do work for the school district, you know it might be sixty days.... When you do work for the County and the City...it takes a while.” [#4]

- The non-Hispanic white female owner of a DBE-, SBE-, and WBE-certified specialty-contracting firm said, “God, have [public agencies] got a lot of paperwork! It’s amazing.” She noted, “[Public agencies have] the kind of work we want to do but it’s just, wow, incredible...the paperwork.” [#38]
- The Subcontinent Asian American owner of an architecture and design firm stated that his firm performs primarily private sector work. He said, “It’s where the market knows me. We could definitely serve the public market, but like I said earlier, because I started this firm in [the private sector] through the referrals, we get more private projects than public.” [#6]
- The non-Hispanic white male representative of a general contracting company stated that the public sector has “larger regulatory hurdles [than the private sector].” He said that there is more paperwork required for public funding. [#41]
- The non-Hispanic white male owner of a concrete inspection agency stated that his company does work primarily for the private sector. He said, “I haven’t really expanded to doing any city bids or anything.... I’ve always thought that I really need to find out how to start doing bids, you know, with Caltrans and LA City.” [#59]

**Some interviewees said that pursuing public sector work is challenging, for some, especially at first.** [e.g., #9] For example:

- The Black American male owner of a DBE- and SBE-certified contracting firm stated, “Basically, there is a lot of unfairness, just a lot of mishandling of things in public contracting. For instance, I just recently won a contract from a public agency where I was low [bidder] on it and the agency decided to rebid it with hopes that I would not be the low bid the second time.” He added, “...the agency practices unfairness. In this example, the things that the agency added to the job were not things for a substantial difference, meaning they could have ordered a change order or added the differences to the contract, but they did not and chose to rebid it.” [#61]
- The Subcontinent Asian American female owner of a DBE- and LWBE-certified engineering firm said that working in the public sector “is very political. You have to know the right people. Even if you can do the job, they don’t trust that you can do the whole job.” She added, “For the public sector in the beginning, we really had to fight hard. In the first few years, I spent a lot of time working with the government representatives.” [#50]

- The non-Hispanic white male owner of a specialty construction firm said that having to struggle to start working in the public sector could be good. “Is it a pain in the rear? Yes, but it weeds out the sloppy contractors.” He noted that a contractor might appreciate the work more if it is a little bit of a struggle to get into the public sector, but he added that it would be nice for it to be easier to obtain work in the public sector. [#37]

The same business owner added that he has thought about getting involved with Caltrans doing “small punch list jobs” and growing slowly. [#37]

- Regarding challenges specific to the public sector, the non-Hispanic white male owner of a specialty construction firm stated, “There is a lot of paperwork. There’re a lot of hoops to jump through.” He added that it is difficult to obtain a surety bond. He said that, if a company does not have the financial means to secure a bond, it prevents a firm from pursuing certain jobs. [#18]
- In reference to small businesses facing challenges in the public sector, the non-Hispanic white male representative of a general contracting firm remarked, “Complexity is one issue.” He said, “It’s not complexity in terms of not being able to understand the project, [but rather] complexity in terms of resources to actually complete the project.” [#26]
- The non-Hispanic white male owner of an SBE-, DVBE-, and SDVOSB-certified consulting firm said that the public sector requires companies to “justify their fees. You have to use their formulas, and I’ve got to cough up another \$15,000 for a study on what my fees should be, and the costs, and that sort of thing. And of course that’s the federal law, and it flows down to Caltrans.” [#45a]
- The non-Hispanic white male owner of an engineering firm reported that obtaining work from public agencies is difficult for new and small businesses because agencies want to work with firms that “have a large office staff and are well established with doing public relations.” He added that public agencies “don’t give work to people they don’t know.” [#42]
- The Black American male owner of a DBE- and MBE-certified construction company stated that a disadvantage of working in the public sector is that “...you have to be connected to a money source of some type. If you’re not, it’s very difficult.” [#60]

**One business representative reported “red tape” as a reason it is difficult for small businesses to work in the public sector.**

- The non-Hispanic white male representative of an SBE-certified engineering firm reported, “The red tape is always difficult, and it becomes frustrating.” He explained that his firm primarily employs engineers and does not have administrative staff or a large overhead budget to handle all the red tape. [#28]



**Some interviewees said that pursuing public sector work is challenging for women and minority business owners.** For example:

- The Hispanic American female owner of a MBE-certified specialty services firm reported that there are not many barriers for her business since her firm has a reputation with contractors, and there are no limitations or barriers owing to her firm's status as a woman-owned business. [#5]

The same business owner said that there is a tendency by contractors to ask more detailed questions when they realize they are dealing with a woman, but she has been able to overcome their skepticism. She said she tries to spend time in the field and on the jobsite to show that she understands the overall business. [#5]

- The Black American male owner of a DBE- and SBE-certified construction-related firm said, "As a minority-owned firm, you [have] to...do...110 percent [more] than what the next guy does." He added, "...they are kind of assuming that you're not going to live up to their standards or not going to be able to do the job properly.... So you really have to go above and beyond. [Even though] I'm a minority-owned firm...you're still going to get the same amount of service that [you would] get from a regular firm." [#19]
- When asked if her firm faces any barriers to working in the public sector, the non-Hispanic white female owner of an SBE-certified specialty consulting company stated that there is "more reporting when you work on a public works project." [#20]
- When asked if there are challenges to entering into the public sector, the female owner of a WBE-certified transportation firm said, "The wages go up a little bit. That's the only bad part about it." [#34]
- The Subcontinent Asian American owner of a DBE-certified transportation services firm reported that his firm has struggled to obtain work in the public sector. He said, "The way it works in the public sector, they want us to apply for a job. We get the calls for bids, but that is just a joke. They know already whom they are going to give jobs.... I have not gotten one job through DBE. The DBE actually is kind of a joke. It doesn't work." [#54]

The same business owner added that he faces barriers in the public sector because, "I don't know the contractors. You need to know the contractors.... You need to bribe them. Without that, you do not get anywhere. [If you don't] know them and you bid the jobs, you won't get anywhere." [#54]

**A few interviewees said that pursuing public sector work is not challenging for small, new, woman, or minority business owners.** [e.g. #31, #40] For example:

- The Black American male owner of an MBE-certified contracting firm reported that, because of DBE goals, it is easier for a DBE to enter into the public sector than the private sector “so long as you have the wherewithal to understand the process of public sector working.” He noted, “In the public sector, even though [prime contractors] would like to self-perform all that work or go with the people they [already know]...they have to give opportunity to small and minority and disadvantaged businesses [because of DBE goals].” [#15]

**Some interviewees said that pursuing public sector work is challenging because of competition, lack of communication, or difficulty understanding legal business issues or regulations.** For example:

- When discussing barriers to working in the public sector, the Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm reported that general contractors are not good at disseminating information to second-tier subcontractors. She commented that Los Angeles Metro has a better program for including subcontractors, making them more of a responsible partner. [#3]
- The non-Hispanic white male owner of an SBE-certified specialty contracting company said, “There are a lot of rules and regulations that have changed over the last year or two regarding water, and how we design, what we use....” [#32]
- The non-Hispanic white male owner of an SBE-certified consulting company stated that agencies like to work with larger firms. He said that this makes it challenging to be competitive. He stated that his firm is currently proposing as a prime with a local municipality and that they received an invitation to bid and compete with three other firms. He noted that, if the project were open to the public to bid, his firm would be out-priced. [#44]
- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm stated that understanding the legal aspects of construction is a challenge for small businesses, and it can even affect their ability to be paid. He said there are challenges “understanding...construction law...and trying to avoid all the holes in construction law, because it seems like all construction laws are all set up to protect the consumer, but none are...set up to protect the contractors. So just understanding what you can do, what you can’t do, and how to get paid.” The owner added that, because his firm “didn’t understand...lien rights and all that” when they first started, they were not paid for one of the first jobs they performed. [#10]
- The female business owner of a DBE-, SBE-, and WBE-certified firm stated, “Our experience during the last four years in working with state and government agencies is that the opportunities and assistance for small business is vanishing.” [PF#17]

The same business owner remarked, “The major shift we have experienced is the large national competitors aggressively [marketed] themselves to the agencies as small business.” She added, “It certainly appears that the present purchasing environment has been high jacked by these large national companies at the detriment of our communities and citizens.” [PF#17]

- The Hispanic American male owner of a DBE-certified construction-related firm indicated that he has done research on how to expand his business, including contacting Caltrans. Regarding Caltrans’ response, he commented, “I’ve called Caltrans and they just send me to their website that I [already] have. It really isn’t much of a help...I’ve tried calling...general contractors...with no success.... I was hoping I can learn more so I can capitalize being DBE.” [PF#2]
- The non-Hispanic white male representative of a DBE- and MBE-certified specialty contracting company stated that regulations for work in the public sector can cause difficulties for small businesses when they conflict with a public agency’s preferences. He said, “For example, the EPA fines us for doing something one [way]. It’s a battle of the local resident engineer on the projects because if we do it EPA’s way, Caltrans is not satisfied. The regulations are lined up and are not consistent with the agencies.” [#46b]

**Some interviewees identified other barriers in obtaining private sector work.** For example:

- The Black American owner of a specialty contracting business reported about difficulties he has encountered moving from the residential to commercial sector. He said, “Most of the commercial contractors that I’ve dealt with I just haven’t liked and haven’t been able to work well with. It seems like...they go in low bid, and that is why they have the job. And they’re trying to make their profit off me by not paying me what I deserve.” [#27]
- The non-Hispanic white male owner of an SBE-certified specialty consulting company said, “...the challenge [to working in the private sector] would be that sometimes [customers and prime contractors are] looking at the low price.... I do not concern myself with the low price; it is what it is. I have my worth and...this is my price.” [#29]
- The non-Hispanic white male representative of a general contracting company reported that it is more difficult for his firm to be competitive in the private sector because much of the work entails negotiations. [#41]
- The non-Hispanic white male owner of a specialty construction firm said, “Dealing with home owners associations is a problem. Typically, there’s a board and not all of the members of the board know what they’re doing or you get caught in the middle of disagreements on the board.” [#18]

- The non-Hispanic white male owner of a concrete inspection agency reported that he has experienced problems with some contractors paying him for work saying, “If they can get away with not paying us, then they won’t... if your collection department is a little weak, then some of the contractors will take advantage of that and try not to pay you.” [#59]
- The Black American male owner of a DBE- and MBE-certified construction company said that a disadvantage of working in the private sector is that some homeowners and especially some private developers are “not policed enough.” [#60]

**Some interviewees said that they have no preference between public sector and private sector work.**

- The Hispanic American male owner of a specialty contracting company stated that he does not have a preference between working in the public or private sector. He said, “Work is work.... We are not affected if it is public or private.” [#40]

## C. 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:

- Keys to success in general (*page 39*);
- Relationship building (*page 43*);
- Employees (*page 45*);
- Equipment and materials (*page 47*);
- Pricing, credit, and relationships with suppliers and manufacturers (*page 50*);
- Financing (*page 51*);
- Bonding (*page 53*);
- Insurance (*page 55*);
- Timely payment (*page 57*);
- Licensing and permits (*page 57*); and
- Other keys to success (*page 58*).

**Keys to success in general.** Many business owners expressed the key factors to success as professionalism, communication, teamwork, training, experience, and reliability. [e.g., #20, #33, #40, #46a] For example:

- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm commented, “The same thing that pretty much makes any

business successful: attention to details, knowing your market, knowing your product...or service area.... Lastly...completing that circle when you say you're going to be somewhere at 7:00 o'clock, you're there at 6:45, not 7:30. And you finish your project on time without issue and...they call you back sometimes." [#10]

- The non-Hispanic white female owner of a DBE-certified consulting firm reported that one general key to success in business is always being available. She added, "It's not hard to get a hold of me. People can get a hold of me very quickly." [#55]
- The Black American male representative of a minority trade organization said, "The main thing is to know what you are doing. Bid on the job for the right price, have your stuff set up so you will force them to pay you in a timely manner." [#52]
- The Black American male owner of a DBE- and SBE-certified contracting firm reported that the keys to business success are to generally know the market, be able to adapt to changes, and be versatile. [#61]
- When asked if there are any general keys to business success, the non-Hispanic white female owner of a DBE-, SBE-, and WBE-certified specialty-contracting business responded, "You have to be smart. You have to work smart." [#38]
- When asked what factors contribute to the success of the company, the owner of a non-Hispanic white male-owned construction-related business responded, "Quality of service; [a] small company can monitor work and provide timely service." [#36]
- The non-Hispanic white male representative of a general contracting company reported that one key to business success is the control of cash flow and that many companies go out of business because they cannot manage their cash flow. He went on to say that cash flow is important both in the public and in private sectors. [#41]

The same business representative said that reading and understanding contractual requirements is a major key to business, especially for contracts in the public sector, because the requirements are more stringent. [#41]

- The non-Hispanic male white owner of a specialty contracting business reported that one of the keys to his success is his background experience. He indicated that he has had more training in his industry than most, and this makes his firm more attractive to customers and prime contractors. [#31]
- The non-Hispanic white female owner of a WBE-, SBE-, and DBE-certified specialty construction firm reported that her tenacity is a key to her business

success. She said, “I keep going...that’s probably the number one [key to my success].” [#22]

- The non-Hispanic white male owner of an SBE-certified specialty contracting company stated that his “tenacity” is a key to the success of his business. He added that he is successful “because I’m able to do an awful lot.” [#35]
- The non-Hispanic white female representative of a general contracting company stated that having goals and a strategic plan are key to business success. She said, “It’s all about planning.” She noted that a substantial amount of planning and organization is critical to her business success. She also said, “We push limits quite a bit.... That’s what you do with strategic planning.” [#43]
- The non-Hispanic white male owner of a specialty construction firm stated that a key to success is not to give up. A firm may have to deal with bad contracts or difficult jobs, but it must keep going. [#37]

The same business owner reported, “You should know your trade...know your line of work and pricing.” He added, “...communication is most important, because things are time sensitive; you just can’t walk away.” [#37]

- The non-Hispanic white male owner of an SBE-certified consulting company said that “putting in good work” is his key to business success. He stated that, because of the firm’s quality of work, most of his business is repeat customers. He added that many of his new customers are from referrals. He added, “Maybe we are not a big company because we don’t know the keys to really growing a big business...but we know how to do good work for the people.” [#44]
- The Black American male owner of a DBE- and SBE-certified contracting firm indicated that relationships with customers and others are very important for businesses. He stated, “...when you work for someone on a contract, good or indifferent, they make decisions. A good relationship can make it easy for you to get things done. For the future, a good relationship with the decision maker can position you for things that are not even being talked about on the table.” [#61]
- The Black American male owner of a DBE-, MBE-, and CPUC-certified specialty construction firm said a key to business success is to “understand your business,” adding, “a company must know how to make a profit.” [#47]
- The non-Hispanic white male owner of an architecture-related consulting firm indicated that participating in design competitions and winning awards is a key to the success of the business. He commented, “If you don’t actually have a beautiful big park to design for something, for a city, you design one for competition and show what we would have done.” [#30]

- The Black American male owner of a specialty contracting business stated that the key to his business success is that “we get referrals constantly because we show up on time, we do the work we’re supposed to do, and it works and lasts and looks good.” [#27]
- The Subcontinent Asian American owner of a DBE-certified engineering firm stated, “I think in [the] construction industry you should...have some knowledge of construction before [going into the business.] This is the main key to being successful in [business]. And you should know the work.” [#12]

The same business owner also reported that finishing the job and providing quality service is “the main key...you have to finish the job on time.” [#12]

- The Hispanic American female owner of a MBE-certified specialty services firm said that the primary key to her success is “the fact that I worked out in the field for 10 to 12 years before I started the business.” She said, “When I was working out in the field, a lot of the guys that were foremen out in the field kind of moved into the office. So that helped a lot, because they know ‘ok yeah she’s been out there, she knows what she’s doing.’” [#5]
- The non-Hispanic white female owner of an SBE-certified specialty contracting business stated, “One of the biggest [keys to success] is to treat other people how you like to be treated.” She said it is important to do good work, be professional, have proper equipment, and have adequate training. [#24]

The same business owner remarked, “Teamwork is very important in any business with both the customer and...employees. [We] all have to work together.” [#24]

- The Subcontinent Asian American owner of an architecture and design firm attributed part of his firm’s success to cultural awareness. He said, “For the international market, we know the culture, we’ve been flexible...[and] work with their culture.” He added, “...it doesn’t matter what language you speak; they all want the great design.... They all want eye catching design.” [#6]

The same business owner said “...[In] the process of designing, you need to be a little bit flexible. You need to work with their pace and culture to get there.... How you discuss the approach is different.... You know how to talk to the international clients.” [#6]

- The Hispanic American male representative of a DBE- and SBE-certified woman-owned engineering firm reported that one of the keys to business success is “definitely our owner...keeping everything on track [and] hiring a lot of people for this small of a firm.” [#23]

- The non-Hispanic white male owner of an engineering firm commented, “The key to success is to just do a good job.” He stated that when a project has a schedule, it is important to manage time, market your firm, and look for work. [#42]
- The Black American male owner of a DBE- and SBE-certified construction-related firm said, “A lot of those skills [and] a lot of that discipline that I had [in] college...helped me [in my business].” [#19]
- The non-Hispanic male white owner of a concrete inspection agency responded that the keys to business success in general are being available and having quality employees. He said, “I personally try to take care of every client I can.” [#59]
- The Black American male owner of a DBE- and MBE-certified construction company stated that a key to business success in general is to be dedicated in what he does, to know the work he is pursuing. He also replied, “Communication, honesty, and relationships are important.” [#60]

**Relationship building.** Across industries, most business owners and representatives identified relationship building, quality work, and repeat business as a key component to success. [e.g., #6, #7, #9, #12, #14, #15, #17, #18, #20, #25, #28, #29, #31, #32, #33, #34, #35, #38, #39b, #40, #42, #44, #45a, #46a, #47, #48, #49, #50, #51, #53, #54, #55, #56, #57, #58, #61] For example:

- The Black American female owner of a new construction-related business reported that relationships with future customers will be “very significant” in her success. [#2]
- The Black American male representative of a minority trade organization stated, “If you have relationships, it doesn’t matter what color you are, because relationships take care of themselves.” [#52]
- The non-Hispanic white male owner of a specialty construction firm stated that customers come first. He said that you have to realize that “they know what they want, but sometimes they don’t know what they want.” He clarified by saying that customers may have a big picture idea, and they are looking to the contractor to fill it in; you have to meet their needs. [#37]
- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm reported that pre-existing relationships with customers and other contractors make it easier to be successful, saying “I’ve been doing this for a long time...so I know a lot of people; I have a history with them. So it makes that a little bit easier.” However, he added, “Even with that history...[customers and primes] always want to use the big [firms]. Even the small guys never want to use the small guys. The small guys want to use the big guys.” [#10]



- The Hispanic American male representative of a DBE- and SBE-certified specialty supply firm said, “Repeat customers. That’s how you keep customers...by providing a good product and making sure that there [are] very few mistakes, and if there are mistakes, you...live up to it.... [You] don’t try to hide it and bury it; [you] come forward with it. And then usually they’re more receptive to that issue than if you were to try and hide it.” [#11]
- The Hispanic American male owner of a specialty construction firm reported that the most important factor to his firm’s success is the relationships they have built with their three biggest clients. He said, “There’s no marketing there.... [We] don’t have to upsell them.... The base is already there.” [#4]
- The non-Hispanic white female representative of a general contracting company stated that relationships with customers are “extremely important.... Communication, communication, communication.” She said that making clients completely aware of schedules and costs, and keeping clients informed, eliminates difficulties and creates trust. [#43]
- When asked if relationships with customers and others in the industry is a key to the success of her business, the Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm responded, “Yes, by far this is [the] number one [key to success].” [#3]
- Regarding key factors to business success, the non-Hispanic white male owner of a SBE- and DVBE-certified specialty construction firm commented, “Showing up on the job.... I go out on every one of my jobs and make sure it gets done exactly like the plans, and when I get done, nobody has any room for argument.” [#8]
- The Hispanic American male owner of a specialty construction firm reported that his firm is small enough to respond quickly to clients’ needs and address any problems that may arise. “[We’ve got managers] out there in the field. [If there is a problem], we know that day. Within two hours, I send an e-mail to my client “you might want to go out on the job, this could be a problem. We’re small enough that we can change, but we’re big enough that we can do big jobs.” [#4]
- The female representative of a CPUC WBE-certified specialty construction firm reported, “[The owner] has great relationships with the customers, which has kept us afloat this long.” [#16]
- The non-Hispanic white male representative of a Subcontinent Asian American MBE-certified services provider said, “The way we work is, we work to benefit the consumer and benefit the account better than anyone else.” [#21]

- The Black American male owner of a DBE- and SBE-certified construction-related firm said that it is helpful in his business to have a “thick skin” and patience with the customer. [#19]
- The Hispanic American female owner of a WBE-, SBE-, and MBE-certified general contracting firm reported that developing relationships with prime contractors is important to the success of a business. She spoke about her firm’s first large job with a large prime contractor, and how working well with the prime “opened doors for other big jobs...which was awesome.” [#13]
- The non-Hispanic white male representative of a general contracting company said that his industry is a “people business” and “relationships will get you a lot further sometimes than anything else.” [#41]
- The non-Hispanic white male owner of a concrete inspection agency reported that relationships with customers and others are at the top of the list of keys to success. He said, “If the contractor is comfortable working with you...and the contractor likes the people you’re sending, you know, that’s 95 percent of your relationship with the contractor that he’s happy with the work that you’re performing.” [#59]
- The Black American male owner of a DBE- and MBE-certified construction company indicated that relationships with customers and others require one to be upfront and honest. He said, “If it’s in a private sector, they don’t actually know what problems or pitfalls they might be in for, so I think it’s important to point them out from the beginning.” [#60]

**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 and are sometimes difficult to find.** [e.g., #2, #5, #7, #14, #17, #18, #21, #31, #38, #45a, #46a, #47, #48, #49, #50, #52, #53, #54, #56, #57, #58, #60, #61] For example:

- The non-Hispanic white male owner of a specialty construction firm stated that hiring the right people and training them is important. He said that a firm can hire low-level employees with low-level skills; but, then, the firm must train them. He added that, if the firm then wants those employees to stick around, it must pay them appropriately. [#37]
- The non-Hispanic white male representative of a DBE-certified consulting firm explained that employees are a key to business success. He said, “We are a professional entity; we have to provide a professional service. The employees have to be knowledgeable, but a lot of times what we do is hire them without or with little experience, and then we teach them the way we do things.” [#39b]

- When asked if good employees are a key to the success of her business, the Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm said, “Yes, skill sets [are important].” [#3]
- The non-Hispanic white male owner of an SBE-certified consulting company said that good employees are “super important.” He pointed out that, for a small business like his, “An employee means a really big investment.” [#44]
- The non-Hispanic white female representative of a general contracting company said that hiring the right employees is a critical key to a firm’s success. She said, “When employees feel they have made an impact and helped in the process.... It is better for morale.” She added, “[Having good employees] shows the client that everything is successful.... Things are going along well.” [#43]
- The non-Hispanic white male representative of a general contracting company said, “Hire smart people, that is always a big key.... Ultimately you are only as good as the people that are working for you.” He reiterated, “Hiring smart people is key.... I mean good, competent, qualified people.” [#41]
- The female representative of a CPUC WBE-certified specialty construction firm reported that the way the firm’s owners treat their employees is a key to the success of the business. She said, “The owners are amazing, and they have employees that have worked for them for over twenty-five years.... In this industry, you have a big turnaround, it slows down, they go elsewhere. They’ve had very loyal employees and they’ve treated [those employees] great.” [#16]
- The non-Hispanic white male owner of an engineering firm stated, “I just think experience and education is the key [to business success].” He reported that in his location, it is difficult to find an experienced pool of talented people because of the lack of universities in the area. [#42]
- The Hispanic American female owner of a WBE-, SBE-, and MBE-certified general contracting firm reported the importance of her ability to recruit many of the workers from her former employer that helped her business. She said that she has some of the same customers who recognized the workers, which gave them confidence in working with her. She stated, “I was able to keep some really amazing core guys. So right now I have a good staff of core guys.” [#13]
- The non-Hispanic white female owner of an SBE-certified specialty contracting business stated, “When you have a good team and you have employees that are happy, then everybody’s happy and you make money.” [#24]
- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm stated that employees are important to his success. “You can sell any type of structure, any type of business development project...and you

can lay out all the policies and procedures with employees but...you can just send one employee out the very first day [that can] screw it all up in an hour. One person will screw up...[a] month's worth of work." He added, "... [In] the construction industry...you're only as good as your last day's work.... If you had a good day's work today, then...maybe they'll call you back for work tomorrow, but if you had a bad day's work today, they're not calling you back. It's done. You're through." [#10]

- The Hispanic American male owner of a specialty contracting business said that the "most important [key to success] I think is hiring the right staff, having the right people, developing the right environment where the employees can be successful, and promoting success is of primal importance." [#9]
- The non-Hispanic white male representative of a general contracting firm reported that one of the main keys to business success is "the employees and their hard work and ingenuity." [#26]
- The Hispanic American male owner of a specialty construction firm stated that a major benefit that his firm has is a key person in the field. [#4]
- The Hispanic American male representative of a DBE- and SBE-certified woman-owned engineering firm stated that "our staff is really responsive [and] our office manager is pretty knowledgeable." [#23]
- The Hispanic American male owner of a specialty contracting company said that employees are the number one key to a business' success. He stated that a few bad employees could hurt a company's good reputation and cost the company money. [#40]
- The non-Hispanic white male owner of a concrete inspection agency stated that employees are vital. He said, "They are the lifeline of my business." [#59]

**Equipment and materials.** Business owners and managers discussed equipment and materials needs.

**A number of businesses reported the importance of having the right operational equipment and materials for operating their businesses.** [e.g., 17, #25, #35, #43, #44, #45a, #47, #48, #52, #53, #55, #56, #57, #58, #60] For example:

- The Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm said that her firm's equipment is a key factor in the success of her business due to the specialized nature of services provided by the firm. [#3]
- The Subcontinent Asian American male owner of a DBE-certified transportation services firm commented, "You need good equipment." He also

said that trucks are “supposed to look good. They need to be clean. We have guys come into the yard and clean the trucks...every second weekend.” [#54]

- The non-Hispanic white male owner of a specialty contracting company said that equipment is important in his industry. He continued, “The one thing I don’t want is for my equipment to break down.... My maintenance program is pretty good.” [#51]
- The non-Hispanic white female owner of a DBE-certified consulting firm reported that she has to be current and uses “state of the art” equipment to keep abreast of the industry trends and services. She added that her firm is currently “focusing on new...equipment which gives us a capability to do an entire project [much faster].” [#39a]
- The non-Hispanic white male owner of a concrete inspection agency stated that certain equipment and clothing attire is a requirement in his line of work, such as “...construction boots, hard hat, safety vest, glasses. It’s a requirement. We are required to have the code books.” [#59]

**Some interviewees discussed advantages of owning all their equipment.** For example:

- The non-Hispanic white male owner of a specialty construction firm stated that, for his line of work, a tractor and dump truck are important to own; but, that on bigger jobs, he has to rent other equipment. [#37]
- The Hispanic American male representative of a DBE- and SBE-certified specialty supply firm stated that one of the keys to business success “is not growing too fast too quick...[and] living within your means as far as...buying equipment.... All our varied equipment is owned outright; we don’t lease it. So if [we] don’t have that payment, usually we can still be pretty competitive.” [#11]
- The Hispanic American male owner of a specialty construction firm said, “Our biggest [competitive] edge is we own all our equipment. There is one piece of equipment that we are making payment on, and we will have that paid off by mid-summer. All the other stuff is paid for.” [#4]
- The non-Hispanic white male owner of an architecture-related consulting firm reported that his advanced equipment helps his firm succeed. He said they use “high tech design tools and representation tools that allow us to kind of do the work of an office that’s twice as big.” [#30]
- The Hispanic American male owner of a specialty contracting company said that equipment is a key factor for his business to be successful. He stated that owning his equipment allows him to offer customers better pricing. [#40]

- The female owner of a WBE-certified transportation firm said that the ability to obtain financing for equipment has helped her firm succeed. [#34]

**Some interviewees discussed that there is no advantage to owning equipment and prefer to rent their equipment on an as-needed basis.** [e.g., #61] Examples include:

- The non-Hispanic white male owner of an SBE-certified specialty contracting company said that, while he owns the basic equipment he needs for all jobs in his field, he also rents additional equipment that is only necessary occasionally. He said, “I rent any equipment I need...to do a job.” [#35]
- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm said that the equipment he uses is “all standard. There [are]...no advantages with equipment anymore.” [#10]
- The non-Hispanic white female owner of a DBE-, SBE-, and WBE-certified specialty contracting firm commented, “We don’t own a lot of equipment.” She added, “By working on public works, infrastructure work, probably 90 percent or 95 percent of those general contractors provide the big equipment like forklifts and cranes that we need. We have some smaller equipment that we get. The big really expensive stuff, we won’t ever have to buy it.” [#38]
- The non-Hispanic white male representative of a general contracting company stated that having the proper tools is important, but noted that there are companies that make the mistake of purchasing too much equipment, thinking that more equipment will get them more work. [#41]
- The Black American male owner of a DBE- and MBE-certified construction company reported that access to the right equipment is a key to success and that he has accounts with equipment companies where he can get any piece of equipment he needs. He said, “I think that some people have to stretch a small business. They get overloaded with buying equipment and...something like that can bog you down...You got to be limited on buying equipment.” [#60]

**Some business owners cited expensive equipment, the cost of repairs, or not having the equipment needed for their operation as barriers.** For example:

- Though describing his equipment as “just standard,” the Black American male owner of a DBE- and SBE-certified construction-related firm reported that his industry is “a tough business to compete in.... The equipment is really expensive.... The [amount that] you have to pay your operators is really high.... Overhead is really high.... Maintenance on the machine is high....” [#19]
- The Black American female owner of a construction-related business noted that acquisition of equipment might be a barrier for her firm, due to limited cash flow. She said, “Hopefully, just with the right job and I am able to prepare properly and have that money saved up so when the time comes you know I

can move forward, but [not being able to obtain the proper equipment] would definitely be a barrier [to business success]." [#2]

**Pricing, credit, and relationships with suppliers and manufacturers.** Business owners and managers discussed the importance of relationships with suppliers and manufacturers. [e.g., #46a, #52, #53, #54, #56, #58, #59, #60, #61] For example:

- The non-Hispanic white male owner of a specialty construction firm reported that he has access to pricing information for materials; however, he believed that larger companies could get better pricing because of the volume bigger companies use. [#37]
- The Black American male owner of an MBE-certified contracting firm reported that relationships with suppliers are important to his firm's success. He said, "Try to work out alliances with these suppliers, especially if they're a non-minority-owned firm. I will go to them and say, I am a minority-owned firm; I am bidding this project. If you give me a good rate, then I am subject to be able to put in an order here, because that project requires a goal. I can meet the goal on the project." [#15]
- The non-Hispanic white female owner of a DBE-, SBE-, and WBE-certified specialty-contracting firm said that obtaining access to pricing and credit for materials can be difficult. She stated, "Oh, credit's a real problem. It's really hard to get anything until you've been in business two years." [#38]
- The non-Hispanic white male representative of a general contracting company stated that access to pricing and credit regarding materials is an important key to business success. He said that a company must be able to show financial strength and assets in order to obtain a line of credit. [#41]
- The non-Hispanic white male owner of an SBE-certified consulting company stated that access to pricing and credit for materials is not that critical to his firm's success as a consulting firm, but he can understand how having access would be helpful to contractors. [#44]
- The non-Hispanic white female representative of a general contracting company stated that access to pricing and credit regarding materials is a key to business success. She stated that, fortunately, her business has not struggled with pricing or credit. She said, "[Credit is] always available to us...even in the downturn." She added that her firm has developed good relationships with banking partners and account managers; and, they have maintained a line of credit but have not had to use it. [#43]
- The Native American male owner of a DBE-certified construction-related firm reported that when he was active in the construction contracting industry, having access to pricing and credit for purchasing materials in advance was necessary. [#49]

**Some business owners did not require pricing and credit for materials in their industry or did not find it important to success.** [e.g., #48, #55]

- The non-Hispanic white female owner of a DBE-certified consulting firm commented, “We are more serviced-based so we don’t have a lot of supplies that we purchase.” [#39a]

**Financing.** Many firm owners reported that obtaining financing was challenging and important in establishing and growing their businesses, purchasing equipment, and surviving poor market conditions. [e.g., PF#4, WT#17, WT#25, #17, #25, #39a, #40, #41, #47, #51, #52, #53, #61]

- The president of a construction-related firm reported regarding access to capital, “I have seen the loss of major private capital...all caused solely by the creation, staffing and arbitrary and capricious implementation of [the] DBE programs.” [WT#1]
- The Native American male owner of a DBE-certified construction-related firm said that financing is a key to business success. He also commented, “Having a line of credit is crucial to be able to survive.” He added that, in his current industry, credit helps in paying employee salaries and consultant’s fees. [#49]
- The female owner of a WBE-certified transportation firm commented, regarding the importance of financing to success, “We have excellent credit and I’ve gotten a few equipment loans.” [#34]
- The Black American male owner of a DBE-, MBE-, and CPUC-certified specialty construction firm reported that access to credit is important to compensate for payment delays. [#47]
- The Black American male owner of an MBE-certified trucking firm reported that he investigated financing possibilities when he started the firm, but “it was kind of hard to procure a loan...so we just decided to go ahead and pay cash for my equipment.” [#25]
- The Black American female owner of a construction-related business said that access to financing “could be a barrier.... Hopefully it’s not. I have a good product, so hopefully it’s not a barrier.” [#2]
- The Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm stated that financing is the most difficult part of the construction industry. She recommended that, if the State is going to have a program that sets a goal for the number of subcontractors, they should “line up a series of banks to support the subcontractors and to help fund the project.” She added that, if there were a banking partner, it would help the State to meet their goals. [#3]



- The president of a DBE-, SBE-, and MBE-certified engineering and construction firm reported that “financing is always a challenge.” He added, “Our firm has gone through six banks [in its decade-long] history....” [WT#11]
- The Black American female owner of a DBE- and SLBE-certified construction-related business stated that financing and lines of credit are critical for a firm’s success. She said, “Because of the economy, [credit] plays a huge factor on if you are able to build up your company...if you are able to obtain a line of credit.” She also said that “if you have no business lined up...to a lot of people you are still a start-up.” [#48]

The same business owner added that the stringent criteria financial institutions place on small businesses make it difficult to secure a line of credit; and, because of the effects of the economic downturn, the credit standing of small businesses could be affected. [#48]

- The non-Hispanic white male owner of a specialty construction firm stated that financing is like “a big, huge machine.” He explained that if he went out and bought a piece of equipment, he would have to finance it; and, then, in order to make the payments, he would have to go out and get jobs just to help pay for the equipment. [#37]
- The non-Hispanic white female representative of a general contracting company stated that financing has become difficult for her clients, which results in fewer clients being able to hire her firm. [#43]
- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm said that obtaining financing is challenging for small businesses. “It’s hard. Getting financing is tough.... If you [were a large business], you would have the ability to go and get more equipment, but you are a small business, so you’re...network pool of equipment and research you’re going to have is going to be much...smaller.” [#10]

The same business owner, to illustrate the issue, gave an example of a piece of equipment he would love to have that costs \$1.6 million dollars. He said that, instead of financing it like a long-term mortgage, “They finance for five years, just like a car payment.... You’re looking at \$30,000 a month...not counting your insurance and maintenance.... Small businesses don’t have that type of ability, none of them do.” [#10]

- The non-Hispanic white male owner of an SBE-certified consulting company said that financing and lines of credit are helpful to his firm. He stated that, in his experience, smaller bankers have given his firm better terms than larger banks. [#44]
- The Black American male owner of a DBE- and MBE-certified construction company commented that there is no way to get bonded without assets

attached. He stated, “I think it’s important to get cash money into the bank, so that you can tell the bonding company, you know what, I’m tired of bidding a two hundred thousand dollar job, I want to bid millions.”

**Some businesses reported that financing is neither a key factor nor a challenge to their success.** [e.g., #7, #36, #42, #59] For example:

- The non-Hispanic white male representative of a Subcontinent Asian American MBE-certified services provider reported that financing is not a difficulty for his firm. He said, “We take the income that we can get and then turn it around and put it back into the business.” He continued, “We don’t want to pull out a loan or anything and jump faster than we can.” [#21]

**Some business owners reported that they had used personal resources to finance their business operations.** For example:

- When asked whether the ability to obtain financing is a key to his success, the Hispanic American male owner of a specialty contracting business responded, “Financing hasn’t been a problem up until now.... We’re actually self-financed; we’ve been able to manage without any additional lines [of credit].” [#9]

The same business owner added that in the future, for his firm’s growth, they might seek financing. [#9]

- The non-Hispanic white male owner of an SBE-, DVBE-, and SDVOSB-certified consulting firm stated that he is “self-financing” his firm. [#45a]
- The non-Hispanic white female owner of a DBE-, SBE-, and WBE-certified specialty contracting firm stated that obtaining financing could be a challenge for new businesses. She said, “Well, I took a loan on my house for start-up capital when I started the business. For things I needed, I could not go to a bank and the credit cards [maxed out]...financing, it is a real problem. Yeah, it is a problem.” [#38]
- The Hispanic American male owner of a DBE- and MBE-certified specialty contracting company reported that financing is hard to acquire. He stated that his firm has not been able to get any financing. He explained, “...We have taken out hard cash loans to keep the company flowing. So we’re stuck where we’re at.” [#46a]

**Bonding.** Public agencies in California typically require firms working as prime contractors on construction projects to provide bid, payment, and performance bonds. Securing bonding was difficult for some businesses, particularly newer, smaller, and poorly capitalized businesses.

**Many interviewees indicated that bonding requirements are challenging and/or adversely affect small businesses opportunities to bid on public contracts.** [e.g., PF#14, #4, #9, #12, #16, #50] For example:

- The non-Hispanic white male owner of a SBE- and DVBE-certified specialty construction firm reported that bonding requirements were the limiting factor on the size of contracts his firm undertakes. He said, “I’ll do anything. The problem is the bonding.” [#8]
- The Black American female owner of a construction-related business said that, because her business is very new, she does not yet know what bonding challenges her firm will face. She said, “I’m ignorant to what I need [in terms of bonding].” [#2]
- The non-Hispanic white female representative of a general contracting company reported that bonding is more difficult for her firm. She went on to say that her firm has found that they must find a joint-venture partner on larger projects just to meet the bonding requirements. [#43]
- The Subcontinent Asian American male owner of a DBE-certified engineering firm said that bonding “is challenging.” He reported that his firm has had problems with understanding contract clauses. He said, “I know the construction stuff, but I don’t know the other clauses like legal issues.” [#12]
- The non-Hispanic white male owner of a specialty contracting company stated that bonding is required in his industry. He noted that “if you’re not bonded, you don’t work.” [#51]
- The non-Hispanic white male representative of a general contracting company stated that the ability to bond is required in his firm’s line of work in both the private and public sector. [#41]

**One owner reported that bonding required by California agencies prevented them from bidding or moving from subcontracting to the role of a prime.** For example:

- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm said that bonding is a challenge for small businesses. “...If you don’t have assets or a good, solid...financially...valued business, then you’re not going to build a bond. So it’s kind of...building blocks.” He added that his firm has been able to obtain small bonds but said, “If I want to go out and bond a \$1 million project, there’s not a chance.” [#10]

The same business owner reported, “You just can’t...[just decide] ‘I’m going to be a prime’...even a small prime...unless you have any money in the bank or lines of credit...and you have to have a track record and a history.... It’s going to be...impossible...[for a] small business with no real capital or...financial resources.... [It is] going to be...tough to bond anything.” [#10]

**Other interviewees reported little or no problem obtaining bonds, or said that bonding was not required in their industry.** [e.g., WT#17, WT#25, #5, #7, #36, #39a, #40, #44, #45a] For example:

- The non-Hispanic white male owner of a specialty construction firm stated that bonding, from his perspective, “is like an insurance policy.” He continued that in order to get a contracting license in the State of California a contractor needs bonding but that he has never had a problem with bonding. He said that now, compared to years past, even firms from out of state are competing to provide bonds for his business, which lowers the price a bit. [#37]
- The Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm stated that obtaining bonding and insurance is not an issue for her firm because they do not reach above their limits. She said that it is critical to have a good relationship with a broker. Her firm always knows where they are within their limits, and they do not bid beyond their capability. [#3]
- The non-Hispanic white male owner of a concrete inspection agency stated that bonding was not important to his business. [#59]

**Insurance.** The study team asked business owners and managers whether insurance requirements and obtaining insurance presented barriers to business success.

**Some interviewees identified challenges obtaining insurance.** For example:

- The Subcontinent Asian American owner of a DBE- and MBE-certified engineering firm reported that “...quite a few occasions when we try to set up appointment with different insurance firms...quite a few times it gets burned. And even you show up, and then they suddenly become unavailable....” He added, “...These sort of things never happened before in my former life as a state official or as a project manager for a big company.... But when you’re a DB firm, you start to encounter these kind of things.” [PF#15]
- The Black American female owner of a DBE- and SLBE-certified construction-related business stated that her she is currently experiencing challenges in obtaining insurance. She noted that brokers many times would only want to assist a small business if the broker covers all of the businesses’ insurance needs (e.g., errors and omissions, health, general liability, professional liability). She said she has told these brokers to “kick rocks.” She continued, “I am still a fish out in this big sea trying to figure where do I land.... [From whom] do I get the help?” [#48]
- Regarding the barrier of incurring insurance costs, a principal of an Economically Disadvantaged Woman-Owned Small Business (EDWOSB-), DBE- and SBE-certified construction-related firm reported that prime contractors have unrealistic expectations of subcontractors in the public sector. She

commented, “...It is not affordable for the small contractor to pay additional insurance cost just to secure the contract.” [WT#14]

- The Black American female owner of a new construction-related business said that she assumes “insurance could be an issue and I assume it’s really gonna be expensive getting started.” [#2]

**Many interviewees said that they could obtain insurance, but that the cost of obtaining it, especially for small businesses, was a barrier to sustaining their businesses or bidding certain projects.** [e.g., #38, #46a, #50, #55, #58] For example:

- The Subcontinent Asian American male owner of an architecture and design firm reported that his firm experienced one instance on a North San Diego Transit Agency project where insurance was a barrier. He reported that the agency required much higher coverage than usual, and the higher coverage level was cost prohibitive for his company. [#6]
- The president of a DBE-, SBE-, and MBE-certified engineering and construction firm reported that “getting insurance has not been a problem...affording it is another matter.” He added, “There is no choice...no insurance, no business.” [WT#11]
- The non-Hispanic white female representative of a general contracting company stated that insurance costs have dramatically increased in recent years. She noted, “Our worker’s compensation [insurance] is very high.... Our general liability is much higher.” She reported that the basis for insurance costs are the firm’s volume of work and not limited by the number of employees. [#43]
- The non-Hispanic white male owner of an SBE-certified consulting company stated that insurance is a very important key to business success. He also says that with many of the firm’s private projects the insurance requirements are steep. “Insurance is scary...and super important.” He stated that his firm carries up to \$4 million of insurance, which for a small firm “is very expensive to carry.” [#44]

**One interviewee reported concerns about small businesses’ ability to secure health insurance for employees.**

- The non-Hispanic white male owner of an SBE-, DVBE-, and SDVOSB-certified consulting firm indicated that meeting insurance costs is a challenge for his firm. He said, “Health insurances kill you.... The errors and omissions, malpractice, and health insurance are expensive. I pay roughly \$500 a month per employee for health insurance, and it goes up every year.” [#45a]

**Many interviewees reported that, while insurance requirements are not barriers to success, insurance is a major business expense.** [e.g., #47, WT#17, WT#34, #17, #21, #36, #39a, #40, #42, #49, #51, #52, #53, #54, #56] For example:

- The non-Hispanic white male owner of a specialty construction firm stated that he has had insurance in the past; but, in the residential market, no one asks for insurance. The owner stated, “If I’m asked for [insurance], I’ll go out and get it.” He remarked, however, if he had work with Caltrans, he would definitely get insurance “because the money would be there to take care of it.” [#37]
- The Black American male owner of a DBE- and SBE-certified contracting firm stated that insurance is “a blanket; you can’t really generalize it as a key because it fluctuates. There are some prime contractors that allow you to work with them as long as you meet the insurance requirements.” [#61]
- The Black American male owner of a DBE- and MBE-certified construction company stated that while insurance is a necessity, it was also important to get a good deal. He said, “I think you have to get a good insurance agent you feel is fair with you for prices.” [#60]

**Timely payment.** Some interviewees reported that lack of timely payment by customers or prime contractors is a barrier in both public- and private-sector work.

**Many interviewees said that slow payment by the prime contractor is an issue and can be damaging to companies in the public contracting industry.** [e.g., PF#4, PF#5, WT#17, #9] For example:

- When asked if he faces challenges with payments from primes, the Hispanic American male owner of a DBE-certified construction-related firm responded, “Yes, they were all public. Not Caltrans.... I do not sit back and just let people walk over me. I’ve had to fight for my money, but I shouldn’t have to.” [PF#2]
- The Black American male owner of a specialty contracting business reported that timely payment could be an issue. He said, “Over the years I’ve found that [on] the few jobs that I’ve done, it’s been hard to get paid on time...with a mainly residential company like this, I’m used to being paid as soon as I’m done with the work. So it’s a big transition to have to wait a couple of months to be paid.” [#27]

**Licenses and permits.** Certain licensing or other approvals are required for both public- and private-sector projects. No interviewees reported specific keys to business success related to licensing and permits, although some did report challenges or barriers to obtaining permits. [e.g., #8, #16, #27, #33, #53, #58]

**Other keys to success.** A number of businesses mentioned keys to their success that do not fall into the above categories such as safety issues, time constraints, and other factors. For example:

- The Hispanic American male owner of a specialty contracting company said it is important for business owners to be totally engaged in projects. He said, “I have seen a lot of companies go down the drain” because of lack of owner oversight and supervision. [#40]
- The non-Hispanic white female owner of a DBE-certified consulting firm indicated that another major key of business success is, “[Love] what you do.” [#55]
- The Subcontinent Asian American male owner of a MBE-certified professional services firm said that having low overhead costs is a factor in his firm’s success. He said, “For me, I cut the overhead...so I, in my company, I do my accounting, I do my invoices.” He stated, “I operate from home...with all the low overheads, I can afford to pay my employees well.” [#14]
- The Subcontinent Asian American male owner of a DBE-certified transportation services firm said, “[DBE] certification can be a key to business success.” He added, “If it is required to use DBE, the agency has to be strict on the use. There needs to be some follow-up and follow through to ensure DBE utilization.” He said that, without enforcement, DBE certification does not help. [#54]
- The Black American male owner of a DBE- and SBE-certified contracting firm indicated, “Time and knowing your market will be key [to success]. Knowing what is best for you as to where you spend most of your time so that you don’t waste your time.” [#61]
- When asked for additional factors to his success, the Black American male owner of an MBE-certified contracting firm reported, “Safety’s another big issue.” [#15]
- The non-Hispanic white male owner of a specialty contracting company stated that “the biggest key to success is to be confident, which I am, honest, and a hard worker.” [#51]
- The non-Hispanic white male representative of a general contracting company advised new firms to “grow small...[and] grow slowly.... It is pretty easy to run yourself out of cash because there is a high demand for working capital as you grow.” [#41]
- The non-Hispanic white male owner of an SBE-certified consulting company stated that an important key to business success is establishing teaming arrangements with other firms in order to be more competitive. [#44]

- The non-Hispanic white female owner of a DBE-certified consulting firm indicated other keys of business success include having a great team. She elaborated, “You have to understand the job but you have to have people that are good in each field that you’re working to help the employees understand the job situation and the consumer...[the] customer...[and] clients....” [#39a]
- The Black American male owner of a DBE- and MBE-certified construction company commented that gradually moving up to larger and larger jobs were important for business success. He said, “You need to graduate from a certain size job...you need to go a hundred thousand, two hundred thousand bid, three hundred thousand, build your company up, you know. You got to be careful, you can’t just jump out there and try to do the biggest job.” [#60]

## D. Doing Business as a Prime Contractor or as a Subcontractor

Business owners and managers discussed:

- Mix of prime contract and subcontract work (*page 59*);
- Challenges for small or minority- or woman-owned businesses to work as prime contractors or consultants (*page 62*);
- Prime contractors’ decisions to subcontract work (*page 67*);
- Subcontractors’ preferences to work with certain prime contractors (*page 69*); and
- Subcontractors’ methods for obtaining work from prime contractors (*page 71*).

**Mix of prime contract and subcontract work.** Business owners described their experience as prime contractors and/or subcontractors.

**Many firms that were interviewed reported that they work as both prime contractors and as subcontractors/subconsultants** [e.g., #4, #15, #16, #17, #18, #20, #27, #29, #31, #39b, #42, #44, #50, #52, #55, #58] **or as suppliers/service providers.** [e.g., #21, #56] For example:

- The non-Hispanic white male owner of a specialty construction firm stated that he has never been a prime contractor on any public works projects. He went on to say that he would sometimes perform as a prime on some residential projects. [#37]
- The Hispanic American male representative of a DBE- and SBE-certified specialty supply firm noted that they are suppliers so they perform as neither a prime contractor nor a subcontractor. [#11]
- The non-Hispanic white male representative of a general contracting company reported that approximately 70 percent of his firm’s work is as a prime. He added that his firm has several specialty divisions that allow the firm to work on jobs as a subcontractor if they cannot act as the prime. [#41]



- The non-Hispanic white male owner of an SBE-, DVBE-, and SDVOSB-certified consulting firm said, “If we have a prime opportunity we go for the prime. If...asked to be a sub, we will be a sub. You get what you can....” [#45a]
- The Black American male owner of a DBE-, MBE-, and CPUC-certified specialty construction firm stated that he has worked as a prime and a subcontractor. He went on to say he prefers to be a sub on larger jobs because there is “a lot less risk.” [#47]

The same business owner reported that his company has been a prime contractor on a few smaller jobs but said that a company can reduce risks and secure a solid profit margin as a subcontractor. [#47]

- The Hispanic American male representative of a DBE- and SBE-certified woman-owned engineering firm indicated that the company works both as a prime and as a sub. He said for “some of the smaller projects it works a lot better for us to be the prime, that way we have all the control over it.” He added that for bigger projects they are not able to work as a prime. He said, “We’ll let somebody else kind of handle that stuff.” [#23]

**Some firms that the study team interviewed reported that they primarily work as prime contractors or prime consultants.** [e.g., #6, #12, #26, #49] For example:

- The Black American male owner of a DBE- and SBE-certified contracting firm reported that he does business primarily as a prime contractor because when he started his firm, he thought that it would be easier as a minority-owned business to obtain prime contracting jobs than to obtain subcontracting jobs. [#61]
- The non-Hispanic white male representative of an SBE-certified engineering firm stated that his firm typically works as a prime consultant. He reported that the reason they are primes is due to the nature of the services they provide and the size of the contracts. [#28]
- The owner of a majority-owned construction-related business reported that his firm always acts as a prime contractor due to the specialized nature of their services. [#36]
- The non-Hispanic white female representative of a general contracting company stated that her firm works as a prime contractor. She said, “We are much more qualified to be a prime rather than to get pigeon holed into one or two small categories [as a subcontractor].” [#43]
- The non-Hispanic white male owner of a concrete inspection agency said that he does business primarily as a prime contractor. “Our company is considered a prime. By code we’re always supposed to be paid by the contractor.” [#59]

- The Black American male owner of a DBE- and MBE-certified construction company indicated that he prefers to do business as a prime contractor because then he can have more control over the treatment of his subcontractors. He said, “We’re going to be fair with them and we are paying them. They can feel totally comfortable with us.... I don’t feel that with primes because you’re just a number.” [#60]

**Some other business owners and managers reported a preference for the subcontractor role, being limited to subcontracting based on the nature of their work, or having difficulty breaking into the prime contracting arena.** [e.g., #7, #9, #10, #19, #22, #25, #32, #34, #35, #38, #40, #46a, #53, #54, #57]

- The Hispanic American female owner of a MBE-certified specialty services firm stated that her firm only works as a subcontractor and not as a prime contractor. She indicated that this is because she has an “A” class license not a “C” class license that limits her to the role of subcontractor. [#5]
- The Black American female owner of a construction-related business stated that she anticipates working as a subcontractor because of “the nature of the business and lack of funds.” She added that she would eventually like to grow her business to the point where she can act as a prime contractor. [#2]
- The non-Hispanic white male owner of a specialty contracting business said that he “sometimes” prefers working as a subcontractor because he does not have to hear unreasonable complaints from the client. He said, “[The prime contractors] have to deal with the client, not me.” [#31]
- The Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm stated that her firm generally performs as a subcontractor due to the nature of their business. She reported that her firm once had a long-term contract with the City of Los Angeles [as a prime] because the project requirements were very specific and required a firm to be located within a small radius of the project site. [#3]
- The non-Hispanic white male owner of an architecture-related consulting firm reported that most of his firm’s work is subcontracting. He said, “It depends on the project and it certainly depends on the client.” He said he prefers to prime a project because “you have the control, direct interface, not a whole lot of interpretation of communication.” [#30]
- When asked if his firm works as a prime contractor, subcontractor, or both, the non-Hispanic white male owner of a SBE- and DVBE-certified specialty construction firm stated, “I try not to be a prime because as a prime, I’m pretty much going to have to...get a bond. And...you don’t want to do business with [bonding companies].” He added that this was “because a lot of the bonding companies have ties to organized crime. That’s how they launder their money.” [#8]

The same business owner stated that he prefers being a small business that only subcontracts. He said, “Actually, I have an advantage because I’m a small business. I have a real advantage because they [the prime contractors] have to be competitive on a very large scale. And to do that, they have to use subcontractors that they may or may not have worked with before and have to believe that they will do the work correctly.” The interviewee went on to say that having such a large operation makes it much harder to profit from a

- The Black American female owner of a DBE- and SLBE-certified construction-related business stated that her firm always works as a subcontractor and learns from primes about the industry. She said, “As a sub, I am not responsible for the entire [project]...[as a prime] if something goes wrong on the project, then you are responsible for it...[and] that will put you out of business.” [#48]

**Challenges for small or minority- or woman-owned businesses to work as prime contractors or consultants.** Business owners described the challenges they faced working, or attempting to obtain work, as prime contractors or prime consultants. For example:

- Regarding challenges that a small business faces when acting as a prime contractor, the Black American male owner of a DBE-, MBE-, and CPUC-certified specialty construction firm reported that “challenges such as paperwork, insurance, bonding, capacity, access to capital...are amplified by a factor of ten [when working as a prime contractor].” [#47]
- The Native American male owner of a DVBE-certified transportation firm commented that the challenges he sees for small businesses that work as primes depends on the size of the project. He explained, “Being a prime contractor, well it’s really hard because you got to start small. You have to get the Minor B contracts, those contracts \$281,000 or less to be a prime contractor because you’re not going to get the bonding for anything larger.” [#57]

The same business owner added that the challenges for minority-owned firms differs depending on the specific type of business and on relationships the company may or may not have. [#57]

- The Subcontinent Asian American female owner of a DBE- and LWBE-certified engineering firm said, “The biggest hurdle is the size of the project. That is true especially in a project where you may not have enough employees.” [#50]
- The non-Hispanic white female owner of a DBE-certified consulting firm indicated, “A challenge is having few minorities or women in business. You can feel a little isolated. Also, dealing with all male groups like construction. We educate; these guys do not like having a female telling them what to do,

teaching them or presenting an education class. That's not as acceptable to them as another man telling them." [#55]

- The Subcontinent Asian American male owner of a MBE-certified professional services firm stated that he only performs work as a subcontractor. He stated that "to be a prime is a big step." He explained that he does not have the resources to pursue work as a prime contractor. He said that he could not compete with the large companies who have "people dedicated to building relationships, writing proposal, and are trained in interviews." [#14]
- The non-Hispanic white male representative of a DBE-certified construction-related firm when asked about challenges for minority- or woman-owned small businesses responded, "Today, I'm going to go out on a limb and [say that] maybe the "good ol' boy" network still exists; but not as much as it used to 30 years ago." He added, "I think the playing fields have improved and are much leveler today." [#53]
- The non-Hispanic white female owner of a DBE-certified consulting firm reported that, recently, her firm must work as a subcontractor because her public agency clients have extremely high insurance requirements. She said, "More recently, I will only work as a sub because of the indemnification clauses and some insurance requirements for some public agencies, which are unwilling to make any change with respect to liability...." [#55]
- The Native American male owner of a DBE-certified construction-related firm when asked if there are challenges for small business to work as a prime said that a small business bidding as a prime contractor is "like little fish swimming in a shark tank." He says there are larger firms with internal resources to pursue projects and present owners with nicely packaged proposals. He went on to say, "You know, writing a proposal is very difficult for a small firm." [#49]

The same business owner reported that he is not aware of challenges faced by minority- or woman-owned firms. [#49]

- The Hispanic American female owner of a WBE-, SBE-, and MBE-certified general contracting firm stated that her firm works primarily as a subcontractor. She reported that she attributes this to the lack of staff and resources required to work as a prime contractor. [#13]
- The Black American female owner of a DBE- and SLBE-certified construction-related business stated that the level of risk and liability of working as a prime contractor is usually too great for a small business to handle. [#48]

The same business owner stated that, as a minority female, she is required to demonstrate that she understands the construction industry and that her

employees are held to a higher standard. She also said, “I have so many other barriers that white people do not have to face because they are white.” [#48]

- The Subcontinent Asian American male owner of an architecture and design firm said that one of the challenges his firm faces trying to gain work, as a prime, is their size. He reported that they know they can do bigger projects, but potential clients look at their size and question whether they can do the work. He said, “In reality, design work does not require you to be large.... Many other big name design firms don’t have that many people.... It’s really not about size.” [#6]
- The non-Hispanic white male representative of a general contracting company when asked if he has observed any challenges specific to minority- or woman-owned small businesses stated that minority and woman-owned businesses sometimes contract for more work than they can handle because the opportunities are available. He added that those firms may not have the financial strength to manage the work and they get into trouble. [#41]
- The Hispanic American male representative of a DBE- and SBE-certified woman-owned engineering firm reported that paperwork is a big challenge for small businesses working as primes. He remarked, “We have to put so much paperwork together just for payroll.” He said they need one payroll report to pay their employees, a different payroll report for Caltrans, and another payroll report for the prime. [#23]
- When asked about specific challenges to working as a small subcontractor, the female representative of a CPUC WBE-certified specialty construction firm stated, “When you’re a smaller company...you have to have a little bigger margin to cover because you have less quantity that you’re doing.” She added, “So when you do go out and you bid a job, you know you’re bidding against somebody that can underbid you because they have more work; they don’t have to have that, the higher margin.” [#16]
- The non-Hispanic white male owner of an SBE-, DVBE-, and SDVOSB-certified consulting firm reported, “In my business, [the challenges is] getting the project. You have to have experience. Some public agencies require that you have experience with [that agency], which is sort of a ‘Catch 22.’” He also said, “I think the biggest problem being a prime is getting the work from the public sector. With the private sector, we are always a prime. Virtually all of our private work is a prime.” [#45a]

Regarding challenges for women- and minority-owned firms, the same business owner reported that far more subcontractors are woman-owned than are minority-owned. He said, “I think basically we deal with a lot of subcontractors that are women. I’ve only had a couple of minority owned companies that I’ve worked with, and I was a subcontractor to them.” [#45a]

- Regarding challenges for small businesses to work as prime contractors, the non-Hispanic white male representative of a general contracting firm indicated that small businesses see challenges “in trying to figure out how to estimate a job and bid it. And so they may or may not be accurate in their bidding.” [#26]
- The non-Hispanic white male owner of an architecture-related consulting firm indicated that one of the challenges for small businesses working as primes is interacting directly with the agency rather than having a prime contractor as a buffer. He said, “When we’re leading the project it just gets more complicated, [and we have] more responsibility.” He noted that “one of the biggest tricks in public work is working through the approvals process and trying to sort out where things overlap or are redundant or...contradictory [while] still maintaining high quality project.” [#30]
- The non-Hispanic white male owner of an engineering firm said, “I think [minority and women owned businesses] have the advantage.” He added that since the public sector has goals for disadvantaged-, minority-, and women-owned businesses, these firms have an advantage. He further said, “As far as I’m concerned, I think [the DBE/WBE/MBE] percentage is unfair.... The fact that I’m not disadvantaged is unfair.” [#42]
- The Black American male owner of a DBE- and SBE-certified construction-related firm said, “It’s a struggle being a minority-owned firm, especially when you are trying to get a foothold in the business. [There are]...companies out here that have been in business for 50 years and you are trying to compete. You are trying to get your name out there so it is...tough and...there are struggles with...being a minority.... It’s mainly just trying to get a foothold in the business.” [#19]
- The non-Hispanic white female owner of a DBE-, SBE-, and WBE-certified specialty contracting firm commented regarding challenges for small businesses, “There’s too [much] paperwork....” [#38]
- The non-Hispanic white male owner of a specialty construction firm said, “General Contractors have a reputation for paying you slowly.” [#18]
- The non-Hispanic white male owner of a concrete inspection agency indicated that women may have some disadvantage because they are viewed as not having on-the-ground experience in the industry. “They’ve learned through a book, more than likely. So now they are the compliance agent and they’re telling the contractor what to do and what not to do. And some of the contractors don’t like that because there is an advantage of being in the industry. Knowing there is a problem that you can work around over an email coming in and saying absolutely you can’t do it this way? The only reason why she knows that [is] because it’s typed in the code book.” [#59]

- The Black American male owner of a DBE- and MBE-certified construction company said that the challenge he believes small businesses have working as primes is the amount of credit they have toward the payroll. [#60]

When asked about challenges for minority- or woman-owned businesses, the same business owner responded that “one of the biggest challenges is that some people don’t think you are qualified to do the work and often they will just tell you that.” [#60]

**Some business owners reported that they do not have experience with, or knowledge of, challenges for small, women- or minority-owned firms working as primes.** [e.g., #20, #61] For example:

- The non-Hispanic white female owner of a DBE-certified consulting firm explained that she did not see any challenges for small businesses that work as primes. She indicated, “I guess the biggest problem you’d have is just making sure you have all the resources you need to do the job. I would make sure you have the personnel and everything to do the job, you know, that’s the big thing.” [#39a]

Regarding minority- or woman-owned firms, the same business owner said, “I think the hardest part is getting through the hoops of getting certified and then there’s so many different certifications and getting to the entities, different entities, [for example] Caltrans and others.” [#39a]

- The non-Hispanic white male representative of a Subcontinent Asian American MBE-certified services provider reported that being “minority-owned is not really” an issue. He said, “It doesn’t really affect anything.” [#21]
- The non-Hispanic white female owner of a DBE-, SBE-, and WBE-certified specialty contracting firm, regarding challenges for minority- or woman-owned firms commented, “Once you have the certifications, there are always jobs that need the certification....” [#38]
- The Hispanic American male owner of a specialty contracting company stated that challenges for minority- or woman-owned small businesses are different for each individual. He further explained that he is aware of individuals who were unable to speak English when they began to work with his company because of their lack of education. He said they “followed in my footsteps and their businesses became big.” [#40]
- The non-Hispanic white male owner of an SBE-certified consulting company said that the challenges encountered when working as a prime are no different for small businesses than for large businesses. He said, “The tasks are the same...just managing the people, communication with the client, and managing expectations.” [#44]

- The non-Hispanic white male owner of a specialty contracting company said, “I’ve worked around a couple of...[Black Americans], and they were just as good as me.... I don’t see what their challenges are. I mean they’re good.” [#51]
- The non-Hispanic white male owner of a concrete inspection agency stated that he did not see any challenges for small businesses that work as primes. He said, “It is more of an advantage working as a prime over working as a sub working under a contractor.” [#59]

**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 said that they usually perform all of the work, subcontract parts of a project based on specialty, or subcontract very little of a project.** [e.g., # 44, #39b] For example:

- The non-Hispanic white male representative of an engineering firm reported that when the firm performs as prime contractors they often subcontract out work in specialty fields. [#33]
- The non-Hispanic white male representative of a general contracting company reported when acting as a prime contractor stated, “We self-perform 60-70 percent of our work, but we look for opportunities to subcontract on every job.” He noted that his firm self-performs all work where schedules are rigid. [#41]

The same business representative added that, on jobs where schedules are not rigid, his firm decides whether to subcontract out work and to which companies to subcontract to, based on capability and price. [#41]

**Prime contractors reported selecting subcontractors based on quality of work, goal requirements of a project, or other factors.** [e.g., #39a, #55, #58, #60, #61] For example:

- The Black American male representative of a general contracting firm stated that they look at the job and see if there is a DBE goal. “...We find out exactly what that goal is and we make sure [we] meet that. [We also] look at the project and see what kind of work [we] can give to a small disadvantaged business and...the value of that work so we can meet that goal.” He said they “break up the project and find as many DBEs as we can to bid on each of the types of work that we break out. We also look at our work that we usually do ourselves and see if we can break it down into smaller packages and see if we can give that to our DBEs to assist them.” [#26a]
- The Subcontinent Asian American male owner of a DBE-certified engineering firm stated that he has a few subcontractors that he uses. He says that they are minorities, “and they are good to me. [Non-minorities] think a different way. [I am comfortable doing business with] minority people because they know me



[and] I know them [a] little bit. Minorities handle thing[s] in a different way.”  
[#12]

- The Subcontinent Asian American female owner of a DBE- and LWBE-certified engineering firm said, “For subs we usually look at the [Local Business Enterprise] minority firms.... If I have a job...I’d give it to a minority firm.” [#50]
- The non-Hispanic white female representative of an SBE-, DVBE-, and SDVOSB-certified consulting firm reported that, even though her firm is a small business, it is still required to meet small business subcontracting goals when working as a prime. She stated, “On occasion if we are the prime, despite the fact that we are a small business, we still have to follow their requirements.” She added that a program administered by a certain municipality requires small local businesses to give away a portion of work to other small local businesses. She said, “Sometimes we are making decisions or choosing [subcontractors] based on what our requirements as a prime are.” [#45b]
- The non-Hispanic white male owner of a concrete inspection agency reported that he chooses subcontractors based on experience, quality of work specialty, references, and availability. [#59]

**Many prime contractors indicated that they use the subcontractors with whom they have a pre-existing relationship.** [e.g., #28, #44, #45a, #49, #60] For example:

- The Hispanic American male representative of a DBE- and SBE-certified woman-owned engineering firm stated that his firm subcontracts out inspection, direct management, and geotechnical services. He reported that his firm does prefer to work with certain subcontractors saying, “We generally work with the same ones.” [#23]

The same business representative added when working with certain subcontractors, other than their usual preferred subs, the firm runs into problems with “one-man shops or one-woman shops where they’re the only person doing stuff.” He said getting things done on time can be an issue for one-man shops because “they have just such a low rate [one-man shops] can’t hire anybody else to do anything for them.” [#23]

- The non-Hispanic white female representative of a general contracting company stated that her firm has a set of subcontractors that they prefer to work with and have worked with for several years. She reported that vetting new subcontractors requires research and time. [#43]

**Subcontractors' preferences to work with certain prime contractors.** Business owners discussed whether they preferred working with certain prime contractors.

**Some interviewees mentioned speed and reliability of payment, reputation, and safety record of the prime as reasons to prefer certain prime contractors and avoid others.** [e.g., #4, #9, #13, #15, #17, #20, #33, #34, #35, #38, #40, #46a, #53, #56] For example:

- The non-Hispanic white male owner of an SBE- and DVBE-certified specialty construction firm reported that he prefers to work with one prime because that prime "...is organized, they want the job done, they know how much you're going to charge them, and they're willing to pay what you have told
- The female representative of a CPUC WBE-certified specialty construction firm reported that they prefer certain primes based on "...how solid the company is [and] do we have a history with the company." She said, "There's some companies...we've been doing business with for over 20 years, and obviously we would keep going with those. But when it's a new company...we just want to make sure that it's something that we're going to get paid for." [#16]
- The non-Hispanic white male owner of an SBE-certified specialty contracting company when asked if there were certain prime contracts with whom he prefers to work, responded, "Yeah, you know who pays fast and who pays good, and who doesn't pay and who you have to squeeze to get your money. There's certain ones...[We] bid lower to some people and higher to others just because I know them and have trouble collecting money." [#32]
- The non-Hispanic white male owner of an SBE-certified specialty consulting company reported that his firm looks at the history of cooperation with the prime contractor. He stated, "It's very important for me to work with somebody I can depend upon...and that will pay on time.... I've got to know who the contractor is." [#29]

**Some interviewees described the "good and bad" associated with working with certain prime contractors.** For example:

- The Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm stated that the volume of paperwork related to compliance is one of the biggest challenges when working with primes. [#3]

The same business owner added that dealing with third-party compliance companies is also a challenge. She explained, "To get on the same page with [the third party compliance company] and communicate the requirements to our subcontractors (if we have subs) and get them to comply is a challenge." [#3]

When asked if her firm prefers to work with certain prime contractors, she added that “yes” there are certain prime contractors with whom they “by far” prefer to work. She noted that their preference largely depends on how well the prime understands the agency with whom they are working. [#3]

- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm when asked about having a preference working with certain primes responded that some companies are good to work for and some “are bad.” [#10]

The same business owner said that his experience working with prime contractors is highly variable because “we’re at the bottom of the loot pile as far as the pecking ladder goes...we’re...a third-tier sub. So some days it’s okay; some days it’s not so okay.... There are companies that we do work with that are really good...and there’s some that aren’t.” [#10]

- The Black American male owner of a specialty contracting business when asked about his experiences working for primes stated that there are “general [contractors] that...aren’t really very hands-on.” He said that he has experienced general contractors that “spend all their time in the office and don’t really spend much time on on-site. They’re difficult to work with because they expect the subs to build everything, but they’re the builder.” [#27]
- The Black American male owner of a DBE- and SBE-certified construction-related firm reported, “I’ve worked with pretty much all of [the prime contractors].... I prefer not to work with [one particular company].” He commented, “...There [are] a lot of old-school people [at that company and] if there is a disagreement...they deal with it the old-school way...and we’re not kind of used to that.” He added, “I’m more of a professional-type person....” He remarked that he likes to work with certain primes who “...are all real professional.” [#19]

**A few subcontractors expressed no preferences when choosing prime contractors.** For example:

- The Black American female owner of a DBE- and SLBE-certified construction-related business stated that she has no preference to work with certain primes. She said, “I am just trying to work with any of them.” [#48]
- The Subcontinent Asian American male owner of a DBE-certified transportation services firm responded, “No, I don’t have any preferences. I work with everybody who pays me. We do not care. If their company is big and pay, we work with them.” [#54]

**Subcontractors' methods for obtaining work from prime contractors.** Interviewees who worked as subcontractors had varying methods of marketing to prime contractors.

**Several interviewees said that they get much of their work through prior relationships or exposure to prime contractors via the internet, email or referrals.** [e.g., #42, #44, #45a, #55, #58] For example:

- The non-Hispanic white female owner of a WBE-certified specialty construction firm reported, "We put out bids.... We're on Google." She added, "The web has bid boards and I will look and scan what's coming up. We are also on the lists of general contractors as a woman-owned business and they will send over requests for bids by fax or e-mail." [#7]
- The Black American male owner of an MBE-certified trucking firm when asked how he learns about subcontracting opportunities reported that he works through a broker. He reported that primes call the broker, and the broker contacts him. [#25]
- The non-Hispanic white male owner of a specialty contracting business indicated that he gets work from primes through referrals, emails, and Yelp. [#31]

**Some business owners reported that they actively market to prime contractors.** Those businesses reported that they sometimes identify prime contractors from bidders' lists, plan holders' lists, at pre-bid or pre-proposal conferences, or through outreach events.

- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm said, "We use Bid Clerk.... It's not cheap...but it's pretty good.... It gives me a list of everything that's within those realms.... Caltrans has a website but that website's not good.... It's slow, you sit there and log on and it just spins and...that thing is not good at all, as far as trying to actually get job information.... There's [also] the Daily Builder and then there's the Sacramento Builder's Exchange. [#10]

The same business owner remarked, "The Builder's Exchange sucks. Bid Clerk is what I found to be the best." [#10]

**A number of business owners reported that outreach by primes or to other firms is helpful.** [e.g., #6]

- The female Subcontinent Asian American representative of a specialty consulting firm reported that outreach to local DBEs to know their availability and travel locations is advantageous to small business and primes. [PF#12]

The same business representative said, "...Reaching out...gets them on the radar...lets them know...[our] credentials...[and] builds...personal relationships ...." [PF#12]

**One business owner reported that outreach events lack pertinent information for small firms.**

- The female owner of a DBE-certified specialty transportation firm reported that she has attended “meet the prime” meetings; however, she expressed that the meetings lack pertinent information. She commented, “...Help me understand...how it is possible anyone can figure out the sub-contract business on their own without getting proper information on how the process works.” [WT#26]

**Some business owners reported receiving solicitations for bids from prime contractors and some solicitations are challenging. [e.g., #20]**

- The female owner of a certified specialty service firm reported, “I was the only certified [business owner] in the room for the bidder’s conference...[and] everybody wanted me on their team.... I ended up on one team and we won...the award.” [PF#9]

The same business owner added, “They had one of their internal people get certified just as it was being awarded...and substituted us.... I went to the agency...[but] they didn’t do anything.” [PF#9]

**Some subcontractors reported they seek primes they consider fair and good managers. Otherwise, they face challenges. For example:**

- The non-Hispanic white male owner of an architecture-related consulting firm when asked if his firm prefers working with certain primes reported, “The better [primes] don’t necessarily pay better, but they’re fair. And what we look for is a really good relationship with a client, an interesting project and experience, where we find that the less experienced the architect is or the prime is, the more work we have to do because they just are not familiar [with the work].” [#30]
- The Hispanic American male owner of a specialty contracting business reported that “getting stuck with poor management” as one of the primary challenges in working with certain primes. He said, “There’s a lot of times, depending on who the staff is and who the personnel [are] that you [deal] with, it could be a good prime contractor as a whole. But if the staff that gets assigned to a particular project isn’t necessarily up to par, it can make it extremely challenging.” [#9]

**One businesses owner noted that simply obtaining invitations to pre-bid conferences has been a challenge:**

- The Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm said that, for Caltrans projects, not receiving invitations to pre-bid conferences is a challenge for subcontractors. [#3]

**A few businesses reported challenges obtaining responses from prime contractors. [e.g., #14]**

- The female president of a specialty service firm reported facing challenges in securing opportunities. She commented, “We sign up for every project list and send a quote to everyone on every project.... Not one...has called us back....” [WT#31]

**Some faced challenges as small or minority- or woman-owned businesses working with prime contractors. For example:**

- The non-Hispanic white female owner of an SBE-certified specialty contracting business when asked about challenges for woman-owned businesses reported that one of her competitors is not licensed; but, they still get jobs because they are friends with primes, “or they buy them a 12-pack of beer or they go out to the bar after work.” She said, “It’s not based on what your ability is as a woman to go out and do the job, which really angers me because I’m licensed and I’ve worked hard to be where we are today.” [#24]
- The Black American male owner of a specialty contracting business when asked about his experiences working as a subcontractor said, “As long as the general [contractor] that I’m working for is a good general, then I don’t have a problem with [working as a subcontractor with them]. I like to work with generals that know what they’re doing because then...when I show up to the project, it’s usually ready to go and there’s a plan in place.” He said with residential work, clients “have an idea of what they want, but they have no idea how to get there. So I have to fill in the blanks there.” [#27]

The same business owner added, “I haven’t really had any setbacks, I think, because of being a minority. If I have, I’m not aware of it.” [#27]

- When asked if she has encountered challenges because her firm is woman-owned, the non-Hispanic white female owner of a WBE-, SBE and DBE-certified specialty construction firm stated, “I think generally just how we’re perceived [is a challenge]. We have to...be nice, smile, which I don’t get....” [#22]
- The non-Hispanic white male owner of an SBE-certified specialty contracting company stated, “My biggest challenge [when working as a subcontractor] is just getting paid on a timely basis.” He added that this challenge has been improving recently noting that some companies are paying for work on credit cards. “You turn in an invoice and...they run it on the credit card and you’re paid immediately.” [#35]
- The Black American female owner of a construction-related business said that her lack of experience as a business owner and her minority status presents challenges to working as a subcontractor. She specifically talked about instances where she felt that her “youthful appearance” was a barrier because

the older, more experienced, people in the business thought that she could not possibly know what she is doing. She reported that she has had to work hard to prove her competency. [#2]

- When asked if there are challenges for minority- or woman-owned small businesses working as subcontractors, the Hispanic American male owner of a DBE- and MBE-certified specialty contracting company responded that relationships are a challenge for his firm. He said, “Relationships are born. In our part of the business, you’re trying to find out who’s got what, who can sell it out at a better price, who you could contact at a business that you don’t have a relationship with. A lot of times, the prime contractors don’t want to bother with you because they don’t know you. So if you came from a business with somebody new coming in, you can be the greatest...man on the planet, probably won’t get to work without knowing somebody on the other side.” [#46a]

## **E. Potential Barriers to Doing Business with Public Agencies (in general and California state agencies, specifically)**

In addition to barriers such as access to capital, bonding, and insurance that may limit firms’ ability to work with public agencies, interviewees discussed other issues related to working for public agencies. Topics included:

- General experiences working with public agencies or Caltrans (*page 75*);
- Challenges learning about prime and subcontract opportunities in the public sector or with Caltrans (*page 78*);
- Learning about prime contract opportunities (*page 81*);
- Learning about subcontract opportunities (*page 83*);
- Opportunities to market the firm (*page 84*);
- Bonding requirements and obtaining bonds (*page 87*);
- Insurance requirements and obtaining insurance (*page 88*);
- Prequalification requirements (*page 90*);
- Licensing and permits (*page 91*);
- Size of contracts (*page 93*);
- Any unnecessarily restrictive contract specifications (*page 94*);
- Prevailing wage, project labor agreements, or any requirements to use union workers (*page 96*);
- Bidding processes (*page 100*);
- Non-price factors public agencies or others use to make contract awards (*page 105*);

- Timely payment by the agency or prime contractor (*page 105*); and
- Any additional disadvantages or barriers associated with being a minority- or woman-owned small business (*page 108*).

**General experiences working with public agencies or Caltrans.** Interviewees spoke about their experiences with public agencies in general and with Caltrans in particular.

**Some business owners discussed their general experiences with public agencies.** Some reported that the experiences are generally positive. [e.g., #9, #14, #16, #34, #36, #39b, #51, #54, #56, #57, #60] For example:

- When asked about his experiences working with public agencies in general, the non-Hispanic white male representative of a general contracting firm reported, “It’s generally positive.... I think on a project-by-project basis...the majority of our people have really positive working relationships.” He added, however, that “ever since the financial downturn that happened back in 2008, I think there’s definitely been more...claims because I think the dollars are tighter. So I think from that perspective, it’s...a bit more litigious than it used to be in the past.” [#26]
- The Black American male representative of a general contracting firm noted, “There are some agencies that are easier to work with than others.” [#26a]
- The Black American female owner of a new construction-related business reported, “I haven’t really started working yet. I am just getting my certifications now with my WBE. So I haven’t really done any business with Caltrans.” [#2]
- When asked if there are any disadvantages and barriers to doing business in the public sector, the non-Hispanic white male representative of a DBE-certified construction-related firm stated, “There are some little barriers all over the place. I think that’s natural, one of them is the communication and being able to operate with language barriers in our industry with the different non or limited English speaking employees. English language and communication with certain people in the public sector is difficult and seems pronounced in the public sector, especially with the engineers and laborers. So there’s a little frustration with that over the years.” [#53]
- The non-Hispanic white male owner of an engineering firm reported that his firm has developed good relationships with “public agency team members.” He also stated that sustaining these relationships could be difficult because public employees seem to move in and out of positions. Therefore, he said, “The person you might know that might get you the job one year is gone on the next project.” He went on to say, “You can be invested in a general manager as one of your friends, they will make sure that if there is anything they can throw your way, you’re going to get the job.” [#42]



- The Hispanic American female owner of a WBE-, SBE-, and MBE-certified general contracting firm stated, “I’ve had no [challenging] issues with [public agencies] whatsoever. Some of them have you go online and enter your certified payroll on their specific, you know, programs. And so each one has their own different program and that can be a little pain, but I’ve had no issues.” [#13]
- The non-Hispanic white male owner of an SBE-, DVBE-, and SDVOSB-certified consulting firm said, “It’s only as easy as the project manager you get. We do not have any contracts at all with Caltrans. We have one or two possible contracts with primes that have contracts with Caltrans.” [#45a]
- The non-Hispanic white male representative of a general contracting company reported that his firm has performed numerous Caltrans contracts. [#41]
- The non-Hispanic white male representative of an engineering firm said, “One of the reasons why [working with public agencies is] a positive experience is communication.... That’s a huge, huge, huge issue...being able to connect with the right folks in the right departments, because some of these agencies can be very, very large....” [#33]
- The Hispanic American male owner of a DBE- and MBE-certified specialty contracting company stated that Caltrans is “very easy to work with.” He added, however, that “LAX is a pain because they have their own special rules that they have. It’s just hard to get through.” [#46a]

The same interviewee added, “It is great to work with Caltrans to be honest...If you are a sub to [a prime in the] private [sector] you do not know when you are going to get paid...[or] who is holding the money up. At least with...the public [sector] you know when the money comes.” He noted, “If it comes you are happy and if it’s not then you start making phone calls. Then it will come a week later. I know it is coming.” [#46a]

**Some business owners discussed challenges they face in working with Caltrans or with other public agencies. For example:**

- The Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm stated that the Caltrans website is limited since it does not allow a contractor to completely describe and update their services, which has the potential to limit their opportunities. The owner reported that it is critical for a DBE to identify their scope of services as “the old idea of casting out a blanket and see what comes in” is too general. The owner also noted that not being able to update their specific scope of services on the Caltrans website as their services change is a challenge. [#3]
- The Black American male owner of a DBE- and SBE-certified contracting firm stated that his worst case caused him damage. He indicated that he had an

agency project and said, “We were terminated wrongfully...[and] asked to do things that did not pertain to the contract of the job...and because we would not perform, they [cut] us off. And when they did that they caused damage.” [#61]

The same business owner indicated that experiences with agencies do differ and stated, “There is a difference with different agencies.” [#61]

- The non-Hispanic white female representative of an SBE-, DVBE-, and SDVOSB-certified consulting firm stated that “contracting is...really difficult, especially the excel spreadsheets that you have to do for the pricing for the rates because you have to break down pretty much every penny that you’ve spent.” [#45b]

The same business representative said, “Working for somebody like [local city], it’s been a positive experience, because they want to take us on as a prime, and we have worked for them before.” She also noted that the contracting process takes a longer time to award because of the contract approval process. She stated, “Working with [local city] is still easier than working for Caltrans.” [#45b]

- The non-Hispanic white female owner of a DBE-, SBE-, and WBE-certified specialty contracting firm, regarding her experience working with public agencies, stated, “It’s a bureaucracy. It is unrelenting. They forget we are small.” [#38]
- The non-Hispanic white female owner of a WBE-, SBE-, and DBE-certified specialty construction firm reported that her firm has struggled with agency bureaucracy when performing work. [#22]
- The Black American male representative of a minority trade organization said, “Well, it was always tough.... Caltrans is a very, very, very racist organization. They believe that only white folk should have the upper echelon of the contracts, and that is what they do all the time. They keep the same contractors going, they approve the same contracts, and it doesn’t matter what their [DBE subcontracting] goals [are], and what the criteria is [set] for the goals...[because] the goals are never met, and there’s no deliberation about [the failure to meet DBE goals] stopping the contract [from being awarded....” [#52]

The same representative added, “...Caltrans has issues with black folk. I cannot tell you about the Asian...or the women, or the minority.... As related to black folk with Caltrans...Caltrans could do a lot whole better.” [#52]

- The non-Hispanic white male owner of a specialty construction firm said that “public sector wastes and time and energy by redoing the whole bid process.” He gave an example of a project that was re-bid because only two companies

submitted a bid the first time around. He said that the re-bid took several months, and “after the re-bid, the job was more expensive this time than last time and it’s the same job.” [#18]

- When asked to describe his overall experience in working with public agencies and Caltrans, the non-Hispanic white male representative of an SBE-certified engineering firm stated that his firm has not worked directly for Caltrans in the past — only for city projects with Caltrans oversight. He reported frustration with the “myriad of regulations and requirements” involved in working with public agencies. [#28]

**Challenges learning about prime and subcontract opportunities in the public sector or with Caltrans.** Some interviewees reported that learning about contract opportunities in the public sector can be a challenge. For example:

- The Black American female owner of a DBE- and SLBE-certified construction-related business stated that her experiences working with public agencies are not very good because the public agencies do not make an effort to include small businesses in other disciplines when creating contracts. She said, “So lately, I’ve been saying to them, ‘Why is it that no one is thinking outside the box? Why do you certify all of these different businesses, but you never have any work for them in that discipline?’ I don’t get it.” The owner noted that, if Caltrans was going to provide DBE certification for a discipline, they should also ensure there are opportunities for that discipline in their contracts. “Break the package down so that everyone could have an opportunity to work on these contracts.” [#48]
- The non-Hispanic white male representative of a general contracting company stated that some agencies are tougher than other agencies. He noted that some public agencies strive to treat businesses in a contractually strict but fair way, but said that other public agencies “will use whatever tools they can to not pay what is owed firms.” [#41]
- The non-Hispanic white male owner of an SBE-certified specialty contracting company stated, “I don’t have any problem with any of them, other than maybe Caltrans might be a little hard to work with or deal with, a real stickler on paperwork.” [#32]
- The Hispanic American male owner of a DBE- and MBE-certified supply firm commented on challenges he has experienced in working with Caltrans. He remarked, “...We’re global with this product, but we can’t sell Caltrans and we’re a local supplier, something is wrong with this.” [PF#1]

The same business owner when asked if he had luck selling to other agencies in California reported that he sells to railroads in the United States and Canada, copper mines and medical manufacturers, but faces barriers selling to Caltrans. [PF#1]

- The non-Hispanic white male owner of an SBE-certified specialty consulting company stated, “A lot of times what you have [in public agencies] are people that have worked their way up through the bureaucracy and, because they’re ‘yes-people,’ continually they move up through the ladder. I cannot tell you how many people that I have worked with in public agencies that when you get there, they have no clue what they are doing and they cannot make a decision. And yet, they’re the supervisor.” [#29]
- The male representative of a public sector agency commented, “...public sector work is not for everybody.... If you look at the requirements...RFP for professional services...construction books...they can be really restrictive...but when it comes to Caltrans...it might just be restrictive things.” [PF#4]
- The female president of an engineering firm posed the question, “Is corruption the same as discrimination?” She added, “I find that with SANDBAG and Caltrans there is a pay-to-play mentality or just obvious crony capitalism...to the point that I find it worthless to go for the projects.” [WT#12]

The same business representative remarked, “...the big boys...are willing to provide me with “opportunities” to do 80 percent of the difficult work for next to nothing and assume all of the liability.” [WT#12]

- The Black American male owner of a DBE-, MBE-, and CPUC-certified specialty construction firm said, “Dealing with Caltrans sucks.” He said his issue with Caltrans has “a lot to do with the certification process.” He went on to state he has not done business with Caltrans in years and maybe working with the agency has improved. [#47]
- The non-Hispanic white male owner of an SBE-certified specialty consulting company reported that he interacted with Caltrans while working for various cities and: “In working with the public agencies, it just seemed like there was too many people in charge. As far as the management of it went, I didn’t think it was [run] the best...way.” He added that “Caltrans was the worst because they had so many people but, yet, if you called one to question, they would have to call somebody else and it could be days before you’d find out a simple answer.” [#17]
- The Subcontinent Asian American male owner of an architecture and design firm reported he experiences challenges with pursuing public sector work because public agencies want bidders that have prior experience with that particular agency. [#6]

The same business owner offered an experience that he has had in pursuing public sector work. He said that he once bid on a project for the City of Thousand Oaks. The bid process was very straightforward, and the requirements were easy to read. He said that the only part his firm thought

was unfair is that the City wanted bidders to have prior experience working with them. [#6]

- The Hispanic American male representative of a DBE- and SBE-certified woman-owned engineering firm said working with “Caltrans in particular is always interesting because...we have to learn the ways of Caltrans.” He said that Caltrans is “kind of finicky and [it] always depends on who you talk to.” He said they get different answers depending on whom they ask. “I’ve gone to the seminars with the [Caltrans’] audit people and [they said the answer to any question] literally does depend who you get auditing your job. [It is the auditor’s] discretion.” [#23]

The same business representative reported, “Other public agencies don’t usually have kind of the paperwork trail that Caltrans does.” [#23]

**Several interviewees spoke about how working with Caltrans is similar to working with other public agencies.** For example:

- The Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm stated that experiences with public agencies are generally similar to Caltrans; they do not work much with small agencies. [#3]

The same business owner reported that executing a project with Caltrans is not a challenge because Caltrans rules (as compared to other agencies) are “actually quite simpler.” However, it is difficult for a subcontractor to understand if they are meeting the requirements, especially if they are working with a prime that does not communicate the requirements of the project well. [#3]

**Several interviewees spoke about how working with Caltrans is different and better than working with other public agencies.** For example:

- The Black American male owner of a DBE- and SBE-certified construction-related firm said, “I prefer [to work] all Caltrans...because you are protected a lot more there.” He reported that there have been issues where [the primes will try to take advantage of subcontractors]. He added, “If Caltrans is there, then most likely they will not do that.... They will not treat you in any kind of way; talk to you in any kind of way out there.... You have Caltrans to support you if something goes wrong on the job or something is not right. So I prefer to work Caltrans jobs.” [#19]

The same business owner added that when he is working on a Caltrans project, “You always know you are going to get paid.” He added, “I just feel a lot more comfortable working under the Caltrans umbrella [because] you just know you are safe.... You know, if you have Caltrans [that] they are going to look out for you.” [#19]

- The non-Hispanic white male owner of an SBE-certified consulting company stated that his firm has done business with several different public agencies usually performing as a subcontractor. He said that he has also performed as a prime with a local municipality. He stated that working with each agency is different. [#44]

**A few interviewees reported having limited or no experience with the public sector or Caltrans.** [e.g., #21, #40, #43, #49] For example:

- The Hispanic American male owner of a specialty construction firm reported that his firm has no direct experience with public agencies other than the City of Seal Beach. He recalled that his firm bid the project as a prime; and, although did not present the lowest bid, they were awarded the project. He remarked that they bid to perform all of the work, whereas other bidders bid in pieces and planned to use subcontractors. [#4]

The same business owner described the only experience that he has had indirectly with Caltrans, “We were doing an upgrade at the property owner’s expense, but it impacted a highway, so Caltrans came out and told us what we could do.” [#4]

- The Hispanic American female owner of a MBE-certified specialty services firm stated that she has never had a negative experience with Caltrans. She said, “For the most part we deal with them on the freeway only. We do not ever have to deal with them as far as paperwork goes, or the business side of it.... Caltrans deals with the [prime] contractor. We only deal with [Caltrans] as far as the safety issues go.” [#5]

**Learning about prime contract opportunities.** Interviewees discussed opportunities for firm owners and managers to identify public sector work and other contract opportunities, and to market themselves.

**Many business owners and managers identified straightforward ways to learn about public- and private-sector work.** [e.g., #19, #30, #39a, #40, #42, #44, #49, #50, #51, #52, #55, #58] For example:

- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm stated, “You have to be diligent and find [contracting opportunities] yourself ....” He added, “Caltrans’ website will only give you what the project is...[and] a list of bid items.... There is a bid item for [work his firm performs]...[but] they don’t even list [the type of work his firm performs].” [#10]
- The non-Hispanic white female owner of a DBE-, SBE-, and WBE-certified specialty-contracting firm reported, “We search public agencies to check what they’ve got to bid. We watch several bid lines, you know, like Dodge. We

bought a Dodge subscription, which was everything, private and public that is out for bid...." [#38]

- The Black American male owner of a DBE-, MBE-, and CPUC-certified specialty construction firm stated that he learns about prime and subcontract opportunities through solicitations because of the company's certified status. He also stated that he visits "plan rooms and online plan rooms." He added that in the past he has used a web based bid notice program to learn about opportunities. [#47]
- When asked how the company learns about prime opportunities, the Hispanic American male representative of a DBE- and SBE-certified woman-owned engineering firm said, "We'll hear from Caltrans. Our public agencies will usually send [notices] to us or we have a lead service that we use. But most of our local agencies that we worked with will directly e-mail us." [#23]
- The non-Hispanic white female owner of an SBE-certified specialty contracting business stated that, to learn about prime and subcontracting opportunities, she uses "the bid system through the State of California." She said, "I have actually put bids out on some projects, but I haven't gotten any bites yet." She is also "signed up to different cities and they send out a report every other week that shows me what permits have been issued." [#24]
- The non-Hispanic white male representative of a general contracting firm indicated that they learn about contracting opportunities by monitoring the Caltrans' postings. [#26]
- The non-Hispanic white male representative of a general contracting company stated that he learns about opportunities through subscription to the "Dodge News." He also said that his firm has good relationships with many agencies because they have performed work for them, and they "want to see us come back...so they will let us know when projects are coming up for bid." [#41]
- The Black American male owner of a DBE- and MBE-certified construction company reported that he learns about bid opportunities from the Blue Book, emails, and calls. [#60]

**Several interviewees commented that they use websites to identify potential work.** Some reported dissatisfaction with Caltrans' website. For example:

- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm reported, "Caltrans has a website [designed to help subcontractors learn about opportunities] but that website's not good...." He added, "...it's slow, you sit there and log on and it just spins and...that thing is not good at all, as far as trying to actually get job information." [#10]

- The Black American male owner of a DBE- and SBE-certified construction-related firm said that he checks the Caltrans website, “e-bid” [and] any of the city websites to learn about subcontracting opportunities. [#19]
- The Black American male owner of a DBE- and SBE-certified contracting firm stated, “...a lot of times now, I’m really using the internet to my advantage going to the public agency, on their website” to learn about prime and subcontract opportunities. He also mentioned his use of FW Dodge, BidSync, vendor databases, and cold search. [#61]

**Learning about subcontract opportunities.** Many companies reported effective ways of learning about potential subcontracting or that prime contractors reach out to them.

**Some businesses indicated that they have found effective ways to identify subcontract opportunities.** [e.g., #9, #22, #39a, #46a, #48, #52, #53, #55, #56, #57] For example:

- The Black American male owner of a specialty contracting business stated that he learns about most jobs from referrals. [#27]
- The Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm reported that her firm learns about projects and the requirements through their relationships with general contractors. [#3]
- The Black American male owner of a DBE- and SBE-certified construction-related firm reported, “[I] do my own...due diligence.... I check for wherever bids are online.... I go to Plan Holders List, and see everyone that’s [intending to bid]. I send them a bid or I might contact them [to] let them know I’m interested in the job [and will] send them a bid.” [#19]
- The non-Hispanic white male owner of an SBE-certified specialty contracting business said he uses “iSqFt” to learn about bidding opportunities “because that’s what most people are on.” He also uses “word of mouth.” [#35]

**Some companies reported that prime contractors contact them about opportunities.** [e.g., #54] For example:

- The male owner of a DBE-certified specialty service firm reported that primes contact his firm to be included in their bids; however, he said, “I get a lot of phone calls, a lot of emails...[where] you never hear from them again, never.” [PF#10]
- The Black American male owner of a DBE- and MBE-certified contracting firm commented that, because he has worked in the industry so long and has a DBE certification, “I’m getting inundated with opportunities.... So I don’t have to go and look for anything; it comes to me. And then I know how to go to the sources and find out what opportunities are there.” [#15]



- The owner of a WBE-certified transportation firm stated, “Having the WBE-certification in the public utilities sector...I do get invitations to bid all the time.” [#34]

**Opportunities to market the firm.** Business owners shared a range of experiences about marketing their companies that are effective for their firms. [e.g., #9, #50, #52, #56] For example:

- The non-Hispanic white male owner of a specialty construction firm would advertise in the Penny Saver and market to affluent “hill communities” like Pasadena or Bradbury. He would also leave business cards and talk with people in order to “drum up work.” [#37]
- The female owner of a WBE-certified transportation firm, regarding her firm’s marketing efforts, said, “I’m in a lot of construction magazines and stuff like that.... I advertise occasionally on the radio.... I market in a couple magazines.” [#34]
- The non-Hispanic white male representative of a DBE-certified construction-related firm reported that they hire another small business to do their marketing. [#53]
- The Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm stated that they take a multi-faceted networking approach to marketing. They subscribe to online sites (BidSync) and receive notifications via fax by prime contractors regarding project goals. [#3]
- The Black American male owner of a specialty contracting business when asked about opportunities to market the firm said, “It’s all word of mouth now.... I did a lot of branding and a lot of marketing during the recession and the first couple of years after it. [I am now] reaping the benefits of the hard work that I put in at that time.” [#27]
- The Black American female owner of a DBE- and SLBE-certified construction-related business stated that anytime someone solicits her to bid, she sends them her Statement of Qualifications (SOQ) and leaves out pricing information at first contact. [#48]
- The Black American female owner of a construction-related business said that she markets her firm by “just meeting people, networking, that’s the best.” [#2]
- The Native American male owner of a DBE-certified construction-related firm said that he distributes his company brochure at networking events. [#49]

- The non-Hispanic white male owner of an SBE-certified specialty contracting business stated, “My marketing is probably my reputation.” He said, “I very much live off my reputation.” [#35]
- The Black American male owner of a DBE- and SBE-certified contracting firm commented that he allows his reputation and ability to low bid as his marketing strategy. He stated, “My industry is basically in this [particular] area and it’s possible that the lowest responsible bidder will get the job.” Therefore, the opportunity is “more like a focus to know where the market is, get the job, and do the best job you can. From that, you build a reputation and get work from that.” [#61]
- The Black American male owner of a DBE-, MBE-, and CPUC-certified specialty construction firm stated that he attends outreach events “to have an opportunity to meet primes.” [#47]
- The Hispanic American male representative of a DBE- and SBE-certified woman-owned engineering firm reported, “...I’m doing some of the other groups like CMA, so the Construction Management Association as marketing and part of SMPS as a professional marketing group....” He added that to market the business “some other [staff] will do the different stuff like ACEC, ACE, Griff Pug.... [We try to] attend as many events as possible. We also do postcards....” [#23]

The non-Hispanic white female owner of an SBE-certified specialty contracting business reported that two years ago she searched for her type of work on Google and could not find her company. She said “I [saw] all these competitors that only had about maybe 4 or 5 years [of] experience.” She aggressively sought to change the search results and is listed more highly now. She said, “Web presence is really important.” [#24]

- The Black American male owner of a DBE- and MBE-certified construction company reported that he uses his relationships to market his firm. [#60]

**Some businesses reported that they rely on social media or the internet for marketing.** [e.g., #39b, #45a, #58] For example:

- When asked about opportunities to market the firm, the non-Hispanic white male representative of a Subcontinent Asian American MBE-certified services provider reported, “Our biggest marketing right now is Yelp. We have over [200] Yelp reviews [that are] five star.” [#21]
- The non-Hispanic white female owner of an SBE-certified specialty contracting business reported that “having a great website [and] being on Facebook [is important]. Right now in 2016, [the internet is] the best way to reach contractors. They’re out in the field and they...always have their cell phones on [them].” [#24]

- The non-Hispanic white female owner of an SBE-certified specialty consulting company stated, “We don’t really do a lot of marketing or contacting people. We do have a website. [People were asking about it] so we made one.” She added, “We get people calling us based on that [website], but those aren’t generally the people that we want to work for....” She remarked, “...Doing estimates takes my time, and they are free; but if I get ten people calling because they are shopping around, I would rather have the person that is looking for a survey and is...referred by someone we’ve worked for.” [#20]

**Some businesses reported challenges with marketing such as time constraints, a need to increase their marketing, and not marketing at all.** [e.g., #22, #31, #33, #40, #51] For example:

- The non-Hispanic white male owner of an architecture-related consulting firm stated, “We don’t do a ton of marketing. [We] need to get more aggressive about that, in terms of marketing and finding projects. We’re often so busy with projects we have that we just don’t have as much time to do that.” [#30]
- The female representative of a CPUC WBE-certified specialty construction firm when asked if her firm experiences challenges when marketing and seeking opportunities replied, “There are struggles sometimes to getting your name out there.” She added that “sometimes it is who you know and what circles you run with [that decide whether you are] able...to bid on something.” [#16]

**Some businesses reported minimal challenges and no need to increase their marketing. Some described their techniques.** [e.g., #5, #18, #28, #29, #32, #36, #38, #42, #46a, #55] For example:

- The non-Hispanic white male owner of a SBE- and DVBE-certified specialty construction firm remarked that the firm has been in existence a long time. He has good contacts, good networking practices, and is very proactive at reaching out. [#8]
- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm stated, “I try to do all the marketing myself [for instance with our website]. And we respond to every e-mail we get whether it’s [a legitimate request] or not, especially with the mass e-mails when they do the good faith efforts, and we always send back our number...we have a guy that...his only job is to respond to good faith effort numbers.” [#10]
- The non-Hispanic white male representative of a general contracting company reported that marketing to Caltrans is not necessary because they have already established a relationship with the agency. [#41]

The same business representative stated that marketing is very important in the private sector. He noted that he is constantly looking for different types of opportunities to grow his business. He also mentioned that his current

marketing efforts focus on building relationships with larger firms interested in the private sector. [#41]

- The non-Hispanic white male owner of an SBE-certified consulting company stated that he utilizes software to send email blasts, company brochures, industry meetings, and a marketing spreadsheet. Additionally, he said that his firm stays in contact with potential business partners through sending holiday cards. [#44]

**Bonding requirements and obtaining bonds.** Some contractors discussed how bonding is challenging for small businesses. [e.g., PF#4, #12, #15, #16, #22, #38, #50] For example:

- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction reported that bonding is a challenge for small businesses. He said, "...If you don't have assets or a good, solid...financially...valued business, then you're not going to build a bond. So it's kind of...building blocks." He added, "You just can't...[just decide] 'I'm going to be a prime'...even a small prime...unless you have any money in the bank or lines of credit...and you have to have a track record and a history.... It's going to be...impossible...[for a] small business with no real capital or...financial resources.... [It is] going to be...tough to bond anything." [#10]

The same business owner commented that his firm has been able to obtain small bonds but said, "If I want to go out and bond a \$1 million project, there's not a chance." [#10]

- The Black American male owner of a DBE-, MBE-, and CPUC-certified specialty construction firm reported that bonding on public agency jobs could be a challenge because of the size of the bonds. He stated, "Bonding companies require companies to have balance sheets and a profit margin.... This can be a serious issue for small businesses." [#47]
- The non-Hispanic white female owner of a construction-related firm said, "The biggest barrier that we have is financial. We are limited on the size of projects, because we have to get bonds, and our overall net worth is pretty low." [AV#12]
- The Black American male owner of a specialty contracting business stated, "I've had to deal with it a little bit mainly because when I was starting out, my credit wasn't great. So it was a little more difficult to get it." [#27]
- The non-Hispanic white male owner of a professional services firm said that "bonding requirements" are an obstacle to bidding on and winning work. [AV#11]
- The Hispanic American female owner of a WBE-, SBE-, and MBE-certified general contracting firm reported that meeting bonding requirements and

obtaining bonds is a challenge as a small business owner. She said, “You have to have credibility, you have to have so much money in the bank [to get a bond], and because I’m a small business, I need that cash to be able to pay for payroll [and] to buy my material. So as a small business, that’s [bonding requirements] probably what hurts me.” [#13]

The same business owner added that prime contractors sometimes work with her firm to help them meet bonding requirements. [#13]

**Many business owners did not face challenges with bonding or said that bonding was not necessary in their industry.** [e.g., #14, #17, #18, #20, #23, #24, #25, #26, #28, #29, #31, #32, #34, #36, #39a, #42, #45a, #48, #51, #53, #54, #55, #60, #61] For example:

- The non-Hispanic white male representative of an engineering firm reported that bonding is not a barrier for the firm. He said, “No, not for our company. We work for a couple of [clients] that have very, very high requirements for bonding.... We don’t have any issues....” [#33]
- The non-Hispanic white male owner of an SBE-certified consulting company stated that, as a subcontractor, his firm is usually “sheltered” from securing any type of bonding. He also stated that bonding is typically not required for the work his firm performs. [#44]

**Insurance requirements and obtaining insurance.** Some interviewees said that the cost of obtaining the levels of insurance required by government agencies could be prohibitive for smaller or new firms. [e.g., #15, #17, #45a, #48, #58] For example:

- The Hispanic American female owner of a MBE-certified specialty services firm reported that the only challenge she encountered with insurance requirements is when Caltrans started requiring the five-million-dollar umbrella policy, and her firm had to increase coverage. [#5]
- The Black American female owner of a new construction-related business stated that she understands the insurance requirements for her field and anticipates a high cost associated with insurance. She hopes to have sufficient resources to cover the cost. [#2]
- The Black American male owner of a specialty contracting business stated that “insurance, general liability [is] harder [to get when] you don’t have great credit, even though you have this successful business and it’s running well.” [#27]
- Regarding insurance requirements, the female representative of a CPUC WBE-certified specialty construction firm said, “It is very challenging, it’s very taxing, and it’s very expensive.” [#16]

- The non-Hispanic white male owner of an architecture-related consulting firm reported that insurance requirements are an issue “but often we can get around [them]. If there are higher requirements for a project, we can often get project-specific coverage and then that gets complicated.” He said, “Nine out of 10 times [we are] successful in negotiating the insurance requirements.” [#30]
- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm said that some prime contractors use insurance requirements to prevent small subcontractors from working on their projects. [#10]

Regarding Workers’ Compensation insurance, the same business owner reported, “...It’s expensive...it’d be nice if there was a better deal for small...companies, especially small start-up companies for workman’s comp because we’re at a tremendous disadvantage because until you achieve three consecutive years of \$300,000 or more payroll annually, you will not get an EMR [Experience Modification Rate] number....” [#10]

- The non-Hispanic white female owner of an SBE-certified specialty consulting company indicated, “Some of the agencies are very strict on the types of insurance you have to cover. [We had a project where they wanted] us to do this work that is going to cost \$10,000, they wanted us to carry \$5,000,000 liability insurance.... I don’t need to spend this extra premium on a \$5,000,000 liability insurance just so I can work for [that agency].” [#20]
- The non-Hispanic white male representative of an SBE-certified engineering firm said, “Insurance is a big deal [because] it’s very expensive. It can be an impediment in my mind, to somebody who’s starting out

#### **One owner reported challenges with workers’ compensation insurance.**

- The non-Hispanic white male owner of a specialty construction firm said, “We just went through a period where we had to shell out a lot of money for workman’s comp claims ....” He expressed frustration with the workmen’s compensation program saying, “I think there are doctors that are in cahoots with insurance people. I know they made changes where the employer supposedly has an input, but we never had an input in any of this, and so I just got reimbursed for ninety percent of that claim but it took three years.” [#18]

**Many interviewees did not experience barriers with insurance.** [e.g., WT#34, #14, #22, #24, #25, #26, #29, #31, #32, #33, #36, #39a, #42, #47, #51, #55, #57] For example:

- The non-Hispanic white male owner of an SBE-certified specialty contracting business stated, “Insurance hasn’t been a problem for me because I’ve never had any claims.” [#35]

- The non-Hispanic white female owner of a DBE-, SBE-, and WBE-certified specialty-contracting firm reported that she has signed up with State Fund, which is pay-as-you-go. [#38]

**Prequalification requirements.** Public agencies, including Caltrans, sometimes require construction contractors to prequalify in order to bid or propose on government contracts.

**Some interviewees reported that prequalification presented a barrier to obtaining, including work with Caltrans.** [e.g., #45a] For example:

- The Hispanic American male representative of a DBE- and SBE-certified specialty supply firm reported challenges with approval of materials when working on public sector projects. He said, “Sometimes the...approvals seem like they take a little longer. It seems like from the time we submit the approvals until when we actually start [working] could be a month....” [#11]

The same business representative added that Caltrans performs differently than other agencies in that they use Caltrans employees for the inspection process. Whereas many other agencies will contract a portion and just oversee the project. He went on to say that the contracted inspectors or quality control people could add difficulty to the project because “some of those outside agencies don’t have the same approval process. [With] Caltrans pretty much anytime you start a job...they’ll come out and inspect the material before fabrication.” [#11]

- The Subcontinent Asian American female representative of a minority woman-owned DBE-certified supply firm reported that her firm has to submit prequalification information “all the time.” She added, “...some of the prequalification information that we do fill out, I feel is redundant. There needs to be another way to pre-qualify. It takes ten minutes out of one of our days. I know that ten minutes does not sound like a lot, but at the same time, every bid that we do takes a ten-minute situation. Well, that could take a long time for multiple bids.” [#56]
- The non-Hispanic white male representative of an engineering firm reported that the biggest challenge in securing work in the public sector is preparing the proposals and providing Statements of Qualification. He said, “It’s quite a bit of an investment for us. You have to have a dedicated department for resources and staff to be involved in that area.... It’s just that getting that marketing material and getting all that out.” [#33]
- The non-Hispanic white male representative of a DBE-certified construction-related firm commented, “That [prequalification] is something I do all the time. It is a pain....” He added that time to complete the prequalification process is challenging. [#53]

The same business representative commented that it would be helpful “if [public agencies] could centralize [prequalification] or have a clearing house for all their subs where we have to meet certain criteria, they can keep an eye on us monthly and we can report.” [#53]

- The Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm suggested that subcontractors be prequalified. She suggested that the state “find out what you do [the subcontractor] and get you prequalified to partner you with specific contractors that have those specific needs.” She said this would help to improve the number of opportunities for subcontractors. [#3]

The same business owner reported that the current prequalification process is too broad. She also noted that a representative of a state agency informed them that it would take too much effort to change the process. [#3]

- When asked about prequalification requirements, the Black American male owner of a DBE- and SBE-certified contracting firm responded, “One public agency in particular didn’t require or doesn’t require prequalification; however, they do have new online bidding programs which are hard to get through. The thing is that you have to wait on them to respond to you.” He added, “I’ve tried to get a number a few times to bid and I wasn’t successful.” [#61]

**However, some interviewees indicated that prequalification requirements are not a barrier or are standard in their industry.** [e.g., #12, #38, #39b, #41, #47, #48, #50, #51, #52, #55, #57] Examples of those comments include the following:

- The non-Hispanic white male owner of an engineering firm stated that his firm is a “professional business,” and explained that he responds to RFP’s as he becomes aware of them. He said that the primes his firm works with are familiar with his work, so prequalification requirements do not present a problem. [#42]

**Licensing and permits.** Certain licenses, permits, and certifications are often required for both public- and private-sector projects. The study team discussed whether licenses, permits, and certifications presented barriers to doing business.

**Many business owners and managers reported that obtaining licenses and permits was not a barrier to doing business or not required in their industry.** [e.g., #13, #20, #22, #25, #26, #30, #39a, #42, #44, #45a, #46a, #47, #48, #50, #52, #55, #57, #61] For example:

- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm reported, “We have permits we have to get for equipment...but Caltrans is always pretty easy to deal with as far as that goes. Just go right in the permit office and they knock them right out.” [#10]



- The non-Hispanic white male owner of an SBE-certified specialty consulting company reported no barriers or challenges with licenses or permits. He said, “...every two years we have to get a new license, and do continued education.” [#17]
- The non-Hispanic white male owner of an SBE-certified specialty contracting company said that that his firm rarely has to obtain permits but added, “It’s just, again, more paperwork....” [#32]
- Regarding her experiences with licenses and permits, the female owner of a WBE-certified transportation firm said, “I have all of that and everything seems to be smooth. It’s an easy process; I just fill out the information and everything works out well.” [#34]

**Some business owners reported that obtaining licensing or permits could be more of a barrier for small businesses than larger firms. [e.g., #16]**

- The non-Hispanic white male owner of a SBE- and DVBE-certified specialty construction firm said that getting permits, as a subcontractor, was generally not a problem “because the prime gets the permits and gives us a copy of them.” [#8]

The same business owner added, however, that the few times his firm has had to obtain permits for themselves have been difficult. “Getting permits is terrible. You go up to the City of L.A., you go in there in the middle of the day and they’ve got these huge offices in there, there may be one or two people in there.” He stated that permit process in the City of Los Angeles is much slower

volume. [#8]

- The Hispanic American female owner of a specialty construction firm stated that building permits take a long time and are very detailed because they require a lot of information that “I often feel it is completely unnecessary.” She also said that she deals with many jurisdictions in obtaining building permits, and some are easier than others. [#58]
- The Black American male owner of a specialty contracting business said, “I’ve noticed licensing [is] not too bad, but permitting [can be difficult]. Certain billing departments are a lot harder to work with than others.” He said “none of them really seem to have...a standard way about doing things. So you can build...in Sacramento and you can build...in over El Dorado Hills, and...even though they’re only 20 minutes away from each other, there’s a completely different set of standards that they’re working under, so that makes it difficult.” [#27]
- Simplify, the non-Hispanic white male representative of a DBE-certified construction-related firm stated, about licensing and permits. He explained,

“My work may require different permits. It would make sense for me to deal with one permit listing everything. Instead, I am required to double permit. I have to submit everything even though they already have the plans. I have to pay again. To me, it’s double dipping.” [#53]

- The non-Hispanic white male representative of an engineering firm said, “Navigating the maze that it takes in order for us to be able to get our permits...is one of the challenges.” He said that once a company works with an agency and understands their requirements, it becomes easier; but, until that time, it is a challenge. He added, “Licensing is not an issue.” [#33]

**Size of contracts.** Interviewees had a range of comments as to whether the size of contracts presented a barrier to bidding.

**Some interviewees reported that the size of contracts, either too large or small, could present a barrier to bidding.** For example:

- The male representative of a public sector agency commented that the size of a project could be challenging to small businesses. He remarked, “...all things that come along with large contracts...more paperwork...more money involved...and more logistics...can be a challenge....” [PF#4]
- The Black American male representative of a minority trade organization stated, “The size of contract - you better know what you’re qualified to do. So you’ve got to ask yourself.” [#52]
- The Black American female owner of a DBE- and SLBE-certified construction-related business when asked if contracts sizes pose a barrier for her firm answered, “Well I learned early on don’t bid on anything less than \$10 million.... If I bid on anything less than \$10 million, it doesn’t make sense. This is not economical or feasible because I really would not make anything. Those are the contracts that I go after, \$10 million and higher.” [#48]
- The female owner of a specialty service firm remarked, “Nothing much goes on with our local Caltrans office. I would like to bid on larger projects that involve the Kern County area.” [WT#34]
- The non-Hispanic white male representative of a general contracting company when asked if a contract’s size ever prevents his firm from bidding on it reported that his firm has an aggregate and a per job threshold, beyond which his firm will not bid on a project. [#41]
- The non-Hispanic white male owner of an SBE-certified consulting company said that the size of a contract does limit his firm’s ability to bid on it. He said that his firm is comfortable performing in the public sector, as a subcontractor, for contracts up to \$80,000. [#44]

**Some businesses reported that the size of contracts was not an issue or said that they have developed their own limits or comfort zone.** [e.g., #10, #26, #38, #42, #45a, #51, #53, #55, #57, #58, #60] Some pointed to financing; subcontracting and other partnering relationships; and the ability to staff up or rent needed equipment in order to handle large contracts. For example:

- The Black American male owner of a DBE- and SBE-certified contracting firm when asked if the size of available contracts poses a challenge for his firm answered, “Where I’m at now is a comfortable place.” He indicated that \$1 million dollars is the contract threshold that he pursues as a prime. [#61]
- The non-Hispanic white female owner of a DBE-certified consulting firm stated that the size of contracts her company takes on varies based on the sector. The public contract range is \$10,000 to \$25,000, and private contracts go as high as \$1 million. [#39a]

**Any unnecessarily restrictive contract specifications.** The study team asked business owners and managers if contract specifications presented a barrier to bidding, particularly on public sector contracts.

**Some owners and managers indicated that some specifications are overly restrictive, do not make sense, or present barriers.** [e.g., #38, #45a, #48, #55] For example:

- The Hispanic American male representative of a DBE- and SBE-certified specialty supply firm indicated that an unnecessarily restrictive contract specification is the American Institution of Steel Construction (AISC) certification randomly added to a job. He said, “[It’s] a pretty involved process to become AISC certified. It seems like some of the [prime] contractors...put this requirement in on one job, [but] they do not have it on another. [Sometimes we] send in an RFI (Request for Information) on whether...it [is waivable]. Sometimes they waive it, and sometimes they don’t.” [#11]
- The non-Hispanic white male owner of an engineering firm noted that he has only experienced one contract that had unnecessarily restrictive contract specifications. He said, “I hadn’t even been on the job, and they want something in about a week. So they throw, ‘It’s in your contract,’...and I told them, ‘You know what, if I would have known that I had to do this, I wouldn’t have gotten the job. It wasn’t worth it.’ It wasn’t that big of a job.” [#42]
- The Native American male owner of a DBE-certified construction-related firm stated that local school districts require a five-year “track record” for work performed in his industry and that requirement is unnecessarily restrictive to smaller firms. [#49]
- The Black American male owner of a DBE-, MBE-, and CPUC-certified specialty construction firm reported that he has experience dealing with unnecessarily restrictive contract specifications. He said that when he was faced with difficult contract specifications, he “just negotiated a way out.” He stated,

“There is no reason, if you are not comfortable with something in the contract do not sign it...but a lot of smaller guys will get intimidated.” [#47]

The same business owner added that smaller businesses might be intimidated by thinking that a contract opportunity is in jeopardy if they challenge the contents of the contract specifications. [#47]

- The non-Hispanic white male representative of a general contracting company said that he believes there is a tendency for owners to place more risks on prime contractors. He also stated that he would often make a decision not to pursue a project because he believes there will be a long-term dispute over contract specifications. [#41]
- The non-Hispanic white male representative of a DBE-certified consulting firm indicated his awareness of unnecessarily restrictive contract specifications. He explained, “The agency won’t pay you...until the job is done and it’s a six-month job....” He added, “...sometimes that one clause gets you in trouble and you don’t even realize why.... If we really have a problem, we’ll actually have an attorney read it to us to make sure that...we understand what that clause is before we sign.” [#39b]
- The non-Hispanic white male owner of a specialty contracting company when asked if he has ever encountered unnecessarily restrictive contract specifications said, “I know Caltrans is kind of difficult because everything is metric with them, their measurements and everything. I don’t really have any experience with their specifications.” [#51]
- Regarding Caltrans’ contract specifications, the non-Hispanic white female owner of a WBE-, SBE-, and DBE-certified specialty construction firm reported, “We sat down [with Caltrans], not once, not twice, [but] three times...and discussed what I was building. We submitted the plans exactly how [the state] wanted them.” She said, “...when we would submit [the plans], [they] would get rejected because [the plans] [were not] per Caltrans specifications.” [#22]

The same business owner reported that they went back and forth many times with Caltrans on the plans. She said, “We just sat in a meeting where [the state] said specifically he didn’t want [something and] that’s why we designed it like this.... We went through...four or five revisions and each of them got rejected.” She said, “...in the end, we built it exactly how it used to be which doesn’t work, which is why we were building something new.” [#22]

**Some businesses reported no barriers resulting from overly restrictive specifications.** [e.g., #46a, #50, #52, #53, #58, #60, #61] For example:

- The non-Hispanic white male owner of an SBE-certified consulting company when asked about unnecessarily restrictive contract specifications, said, “We are such a small fish in this pond that if we are fortunate enough to win a

public contract...we are in no position to argue the terms of the contract.”  
[#44]

The same business owner added that he is aware that at times specifications can be overly restrictive. He also stated that if there are restrictive terms, he considers them and decides if he wants to pursue the job or not. [#44]

**Prevailing wage, project labor agreements, or any requirements to use union workers.** Contractors discussed prevailing wage requirements that government agencies place on certain public contracts. They also discussed other wage-related issues.

**Many business owners and representatives indicated that prevailing wage requirements could present a barrier to working on public contracts.** [e.g., #9, #15, #18, #34] For example:

- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm said he had encountered problems with certified payroll properly identifying workers on the job site. “When it’s a certified payroll job, everything has to be accounted for...and...sometimes certified payrolls get screwed up. [#10]

The same business owner reported, “...on the job site...the problem is when you’re dealing with employees in the field, a lot of them have a sense of humor about it and they never give the [inspector] the right name...and then...three months later [the certified payroll gets kicked back]....” [#10]

The same business owner added that certified payroll works better with the City of Sacramento than with Caltrans. He reported, “For...Sacramento...the certified payrolls are...on an LCP tracker...[and] as long as all the updates go in place with the software...seems to work...pretty well...[and] a problem...gets caught relatively quickly.” He added, “...[whereas] with Caltrans...notices [get sent] for something that happened a year ago and you have to go and try to track [and] figure out [the problem].” [#10]

- The male representative of a public sector agency commented that he thinks some contractors are not aware of the challenges they face with the minimum wage requirements in the public sector. He remarked, “...[Some contractors are] used to paying X amount and then they come to the public sector, they have to pay double that and they don’t understand all that comes along with that.” [PF#4]
- The non-Hispanic white male owner of an SBE-, DVBE-, and SDVOSB-certified consulting firm said, “We do [prevailing wage requirements].... The rules change constantly especially in California.” [#45a]
- The Subcontinent Asian American male owner of a DBE-certified transportation services firm reported that prevailing wage requirements are not always clear in his business. He explained, “When you ask a contractor ‘is it

a prevailing wage?’ they always say no...[and] then when the job is done they ask you for certified payroll. That happens all the time.” He added, “I was doing a job in [one city] and the rate was low and we didn’t have much work [at] that time. So I took that job and I asked her [if the job had prevailing wage requirements.] She said, ‘No....’ I recorded that because I knew that was a prevailing wage job and she called me after that job and said ‘Hey, I need certified payroll.’...So I played the recording...You know, she never used me again.” [#54]

- The non-Hispanic white female owner of a WBE-certified specialty construction firm reported that having to accommodate union apprentices on jobs is a challenge. She said, “That’s a problem; that’s a big problem.... We have to request a laborer for a job...from the union. What is that [person] going to do?...We are a non-apprenticing field...Now the requirements are saying the apprentice has to be doing what our laborer is doing. You cannot have them do...shovel work....” She added, “[The apprentice] has to be learning his trade. You can’t expect a qualified, experienced laborer that’s running a piece of equipment to give it over to a person that knows nothing.” [#7]

The same business owner added, “This is a dangerous job.... There [are] multiple aspects that are...dangerous and you cannot put a generic person behind the equipment.... It’s just not practical, we have to pay a laborer for four hours minimum whether it’s been an hour or whatever. So they get prevailing wages and it’s a real headache.” [#7]

- The Black American male owner of a DBE-, MBE-, and CPUC-certified specialty construction firm reported that he is a member of a trade union, and he is familiar with prevailing wage requirements for public agencies. He went on to say “[prevailing wages are] intimidating...but there are associations you can go to...for help on the prevailing wage.” [#47]

The same business owner said, “If you are a small company contractor and want to work for Caltrans, the company must be union...that is a barrier.” [#47]

- When asked about his experience with prevailing wage requirements, the Subcontinent Asian American male owner of a DBE-certified engineering firm reported that he had a project with a prominent California city using LCP Tracker to track prevailing wage. He stated that he followed the prevailing wage requirements; and, when he went to enter them into LCP Tracker, the amounts were different. [#12]

The same business owner reported that he ended up paying that employee more than the prevailing wage rate. He added that the city claimed that he provided incorrect documentation, and “they are holding my payment. They are holding my bond. [Labor laws are killing] small business.... No one is

thinking about the small business.... Small business is the backbone of this country.” [#12]

- The Hispanic American male owner of a specialty construction firm reported that the costs of paying prevailing wages could be difficult for his company. He said, “The prevailing wage thing is very difficult for us.... We’re a small company.... It doubles my labor liability....” [#4]

The same business owner added, “I think a mason right now is at \$52 an hour. I understand why they do that, but it is...unfair in the standpoint that the union people are not paying that. Now my cost is that, but the worker does not get that, he only gets \$30 an hour. All the rest is the stuff for vacation, retirement, union dues...the fringe benefits, which a lot of them never get. Because all my friends in the Union, the reason they leave is...they are only working three days a week. The job shuts down. The union [workers] call, ‘hey you got any work?’ I say ‘yeah we’ll give you a day or two.’” [#4]

- Regarding prevailing wage requirements, the Hispanic American male representative of a DBE- and SBE-certified woman-owned engineering firm stated, “It is a nightmare...just putting that all together...[and] making sure everything gets paid correctly and everyone has the right wage.” He said, “I think we missed one at one point and so we had to go back and...make sure everyone got paid the correct rate because there was a notice that the rate went up.” He said, “Dealing with that stuff is interesting. [It’s] a paperwork nightmare essentially.” [#23]
- The non-Hispanic white female owner of an SBE-certified specialty contracting business reported that she received notification that online prevailing wage reporting was mandatory and later received an email directing her to abandon the online format and submit hard copies. She said, “It’s cumbersome [with] lots of paperwork involved. I think it needs to be streamlined.” She also commented that not being a unionized firm can be a disadvantage. [#24]
- When asked what challenges small business face, the non-Hispanic white male owner of a specialty contracting company responded, “Unions.” He continued, “They don’t like [companies in his trade]...that makes it really hard on [those in his trade].” He also noted, “I was union for probably 15 years. When the downturn came, I stepped out of the union because it was too expensive.” [#51]
- The non-Hispanic white female owner of an SBE-certified specialty consulting company reported that prevailing wage and union requirements make working in the public sector harder for her firm. She said, “You have prevailing wage and then you have to hire apprentices that just slows down your production.” She said, “I have to bring a stranger in from the union that doesn’t know anything. [We] have to try and train him in the few days he’s going to be [with us] and then they always claim unemployment on me.” She noted, “I’m

not going to keep them [as employees], but I have to have them in order to have these public works projects.” [#20]

The same business owner added, “Since we are not in the union, the union tends to send us their least-qualified people [when job requirements require that we hire union workers], because...they don’t want us to keep them.” [#20]

- Regarding the prevailing wage requirement, the non-Hispanic white male owner of an SBE-certified specialty consulting company stated that his firm pays qualifying employees the prevailing wage amount but expressed frustration with the requirement. He said, “My opinion of prevailing rate, it is unfair for the private [employer]. The private [employer] has to pay this higher wage and we cannot compete with the signatories.” [#29]

The same business owner reported that prevailing wage requirements are unfair because prevailing wage requirements apply across the whole state. He said that the specific set wages might make sense on “the coast...because the cost of living is higher...[but it causes] the cities and the counties [in other parts of the state] to pay exorbitant costs to put structures up, thus...putting the burden on the taxpayer.” [#29]

**Many firms said that prevailing wage requirements are not a barrier when working on public projects or are part of doing business, can be beneficial to employee morale, or are not factors in their industry.** [e.g., #5, #13, #14, #17, #19, #22, #25, #26, #28, #30, #32, #33, #35, #36, #38, #39a, #42, #44, #46a, #48, #50, #52, #53, #55, #58, #60] For example:

- The Black American male owner of a specialty contracting business reported that when he has been subject to prevailing wage requirements, “It wasn’t too bad.” He said, “I had a good general [contractor that] helped me along the way with things. The extra paperwork...I didn’t find it to be that bad, but it is something that I had to be compensated for.” He added, “If I didn’t have to deal with all the extra paperwork, I wouldn’t have to charge extra for it.” [#27]
- The female representative of a CPUC WBE-certified specialty construction firm reported not working with Caltrans but stated, “The upside [of working in the public sector] would be that it’s a prevailing wage job and it really does keep your employees happy to have that bump in pay.” [#16]

The same business representative said, “Actually our employees absolutely love it, and we love our employees to be happy. So we would prefer to work on prevailing wage jobs.” [#16]

- The non-Hispanic white male representative of a general contracting company stated that prevailing wage requirements present no problem for his firm. He said, “We perform [projects with] prevailing wage [requirements] all the time.” [#41]



**Bidding processes.** Interviewees shared a number of comments about bidding processes.

**Many business owners said that procedures for bidding and proposing presented a barrier to obtaining work and put larger firms at an advantage.** Many interviewees mentioned the time involved in preparing a bid or proposal puts small companies at a disadvantage. For example:

- The Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm remarked that entry to the public sector lacks personality and participation. [#3]

The same business owner described the Caltrans bidding process as being too “boilerplate.” She stated that the Caltrans website does not provide opportunity for a DBE company to describe specifically what they do. [#3]

- The Black American male owner of a DBE- and SBE-certified contracting firm commented that he is uncomfortable with the bidding process at the state level and believes it is unfair. He stated, “Right now with Caltrans I don’t feel comfortable to bid.” He explained that around 2009, “It changed...it wasn’t always [unfair] like that, but it changed.” He further added that bidding is more open on the local level than it is on the state level. [#61]
- The non-Hispanic white male owner of a professional services firm said that “getting on contractors’ lists and bidding is particularly difficult for smaller companies. The rules and paperwork required is a barrier.” [AV#8]
- The non-Hispanic white female owner of a WBE-, SBE and DBE-certified specialty construction firm said that, in the public sector, “no matter how many times you work for [a prime contractor], it’s all about whoever is the lowest bid. And that’s just how California is set up.” [#22]
- The non-Hispanic white male owner of a SBE- and DVBE-certified specialty construction firm said, “If you fix the bid process, you’re going to fix a lot of other stuff. If you fix the bid process, the same [person does not] get the job every time. That’s going to make a hell of a change.” [#8]
- The non-Hispanic white male owner of a professional services firm said the “electronic bidding process is hard to understand.” [AV#15]
- The Black American male representative of a minority trade organization reported that the bidding process may be fair, but it is unfair when smaller projects are not available for bid. [#52]
- The non-Hispanic white male owner of a professional services firm said that “overcoming the knowledge hurdle relating to the requirements for bidding” is a challenge. [AV#11]

- The owner of a DBE- and SBE-certified supply firm commented, “I have presented numbers on a few bids that I know no one can meet because I made up the numbers far below anything listed out there in the public, and I still didn’t get a call back. So I have done it both ways; I have done it legitimately, I’ve reduced numbers to see if I get a response, and I don’t get any back from the...contractors that supposedly run the bids.” [PF#18]

The same business owner added, “So my position today...is that I approach...contractors and I do not get any response back after the bid has been awarded.” [PF#18]

He further added, “So my concern is: Why does that happen? I’m assuming we must be meeting all of our DBE goals.” [PF#18]

- The Hispanic American male owner of a DBE-certified construction-related firm reported facing challenges when submitting a bid for a public works project. He commented, “...I had to pay a percentage of my bid for them to accept [the bid]...I don’t have the working capital to do that...so I can’t submit my bid....” [PF#2]
- The non-Hispanic white female owner of an SBE-certified specialty consulting company reported that she would like to look at bids online but gets discouraged when sites require payment to see bid details. She said, “I’m not paying money to look at what is offered.... That should be free.” [#20]
- The Black American male owner of a DBE-, MBE-, and CPUC-certified specialty construction firm stated that he feels that the Caltrans’ bid process is somewhat “arbitrary.” He said that it is “terribly unfair” when a company spends thousands of dollars preparing a bid and then is disqualified for “some arbitrary, capricious decision” like not meeting a DBE/SBE goal despite doing “all due diligence” and supplying supporting documents. [#47]
- The Subcontinent Asian American male owner of a DBE-certified engineering firm stated, “There is more restriction in the State as compared with the federal government. As far as the bidding process, I think it’s an open competition that the people actually bid their own way.” He went on to say that he believes the bidding process “is a fair process.” [#12]
- The Hispanic American male owner of a specialty construction firm said, “A barrier for small companies in the private sector is the difficulty in bidding against larger companies.” He commented, “[Larger companies will] underbid a job, or they’ll do a job because they’re already there. They have the ability to work in multiple areas because their equipment is already there. The logistics that they can do makes it very difficult [to compete].” He remarked that “the larger companies will bid projects based on the cost of material and double the cost of their labor, but their job cost doesn’t double [due to economies of scale]. We can’t bid that way because we’d never get it.” [#4]

- The Hispanic American female owner of a MBE-certified specialty services firm reported that bidding against larger companies is a challenge because “...the larger contractors can cut the price way more. You know they can lose more than I can. I can’t afford to lose money.” [#5]
- The Black American male owner of a specialty contracting business stated, “It’s hard to foresee how projects are going to go when you’re [bidding on government work] because you don’t control everything that’s going on.” He said, “With my jobs I can go out and look at a site and know exactly what I need to get the job done and how long it’s going to take. [With government projects], I had to work around [many] other subcontractors.” He added, “...there was a lot of spinning of the wheels a lot [on] the days that I went out there and I couldn’t get accomplished what I wanted to get accomplished.... You have to factor that into the bidding process.” He further added, “...if you don’t understand that prior to it, then it makes everything kind of difficult.... You can lose it really easily if you don’t bid it properly.” [#27]
- The non-Hispanic white male owner of an engineering firm said that the bidding process is often unfair to smaller businesses. He said it is not fair that a large company can write a “beautiful proposal...with fees that are double the fees of smaller local firms.” [#42]
- The non-Hispanic white male owner of an SBE-certified specialty consulting company some doubt that public agencies properly evaluate the veracity of some of his competitors’ bids. He said that after having read some of the winning proposals, “I could have [written] down a bunch of stuff that those guys wrote down. I don’t know how much they check to see what stuff’s true or not that they write down; that, I would question....” [#17]
- The non-Hispanic white male representative of a general contracting company said, “It takes a level of experience and competence to make sure that your bid package is complete and responsive.” He also noted that it is critical for a firm to understand the terms of the contract and payment disbursements. [#41]

**Several interviewees reported that the amount of “paperwork” presents burdens to small firms.** For example:

- The Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm remarked that a barrier to public sector projects is that she does not know which documents subcontractors are required to submit. She commented that the Small Business Association (SBA) uses a common repository for required documents. [#3]

The same business owner when asked about challenges to working in the public sector commented that with Caltrans, meeting documentation

requirements is always a “fire drill” and that they are always playing catch up. [#3]

- The Black American male owner of a DBE-, MBE-, and CPUC-certified specialty construction firm stated, “...the only disadvantage is in the public sector.... If you are a contractor with Caltrans, paperwork is an issue....” [#47]
- The Asian Pacific American owner of a professional services firm said, “It’s difficult working with government agencies. We have paperwork and requirement problems that favor our competition.” [AV#19]
- The non-Hispanic white male owner of an architecture-related consulting firm reported that businesses the size of his firm have a perception that working for a government agency would entail “a crazy amount of paperwork.” [#30]
- The non-Hispanic white male owner of an SBE-certified specialty contracting business stated that when working on a Caltrans project “a little more paperwork seem[s] to be involved.” [#35]
- The non-Hispanic white male owner of a professional services firm said, “The paperwork involved [with submitting a bid] is very time consuming. Getting all the certifications necessary is very cumbersome. It is like singling out a group and the specialty paperwork is very discriminating. It would be nice if our government officials could streamline [the process].” [AV#20]
- The non-Hispanic white male owner of an engineering firm said, “There are a lot of difficulties with the permitting process and the paperwork with Caltrans work. Getting bonds and the requirements for their work is too much trouble, and it’s not easy getting payment on those jobs.” [AV#21]

**Some interviewees reported that having to pay a fee in order to bid online presented a barrier to their firms.** For example:

- A female business owner commended Caltrans for their sustainable paperless bidding system but had other comments about barriers she experiences with the bidding system. She commented, “...the problem with those systems are that we have to pay to get access to bid...BidSync...is over \$300 a year for a membership....” [PF#8]

The same business owner commented, “...it precludes or hinders the process of reaching out to local DBEs and giving them opportunities.... At least allow Level B [Minor B] to be a free opportunity to bid on it.... It would make things a lot more equitable....” [PF#8]

- The non-Hispanic white male owner of an SBE-certified specialty consulting company frustration with services like “BidSync” that require you to pay a subscription fee to learn about opportunities. [#17]

**One owner reported very short bidding deadlines on some projects, including some public-sector contracts.**

- The minority owner of a DBE-certified communications related firm commented, “...I get a fax or an email asking me if I will be supplying a bid on a job as a DBE.... The ironic thing is I receive this form two or three days before the bid closing date.” [WT#27]

**One business owner reported lack of transparency as a challenge to the bidding process.**

- The Black American female owner of a DBE- and SLBE-certified construction-related business indicated that she is aware of issues with transparency in the bidding process. She gave an example where when asking a question she received a response; but, the answer was unpublished as a written addendum to the request for bid. “It was never a public response.” [#48]

**Some business owners and representatives did not face challenges from the bidding process or reported that, in their industry, they do not bid.** [e.g., #34, #36, #38, #45a, #51, #58] For example:

- The female representative of a CPUC WBE-certified specialty construction firm reported that the bidding process is “pretty straightforward.” [#16]
- The Black American male owner of a DBE- and SBE-certified construction-related firm indicated that he has not “had any issues with actually submitting bids. The process is...fluent, and it is...easy.... It is simplified. Caltrans does a good job with that...I think everything there works pretty good.” [#19]
- The Hispanic American male owner of a DBE- and MBE-certified specialty contracting company commented that the bidding process “has been real[ly] good. It is basically we go on the website and if the job pertains to us we will take a look. We will make some phone calls to contractors to find out if we are going to do the job or not.” He added, “Sometimes they say no and we try to find someone else that might.” [#46a]

**Other comments regarding the bidding process include:**

- The non-Hispanic white male representative of a DBE-certified consulting firm said, “Well, what we hope to do is to be shortlisted. Once you bid a job, you hope to get shortlisted on one then you just hope that when you go in there and have that interview that you hit a home run.” [#39b]
- The non-Hispanic white female owner of a DBE-certified consulting firm reported that the bidding process, in general, has been okay. She noted, “I prefer agencies that like to have extra points for hiring level. And not enough of them do.” [#55]

- The Black American male owner of a DBE- and MBE-certified construction company stated that the bidding process “could be made simpler.” [#60]

**Non-price factors public agencies or others use to make contract awards.** Public agencies select firms for most professional services contracts and some other contracts based on qualifications and other non-price factors. Some contractors face challenges with non-price factors [e.g., #38, #45a, #52, #55] and others do not. [e.g., #46b, #47, #51, #56, #58, #61] For example:

- The non-Hispanic white male owner of an engineering firm stated that local preferences in contracting are a priority non-price factor for firms in the local area. [#42]
- When asked questions if there are any non-price factors that affect the ability of small businesses to work in the public sector, the Black American female owner of a DBE- and SLBE-certified construction-related business said, “[Some public agencies] wanted you to have five years of experience with working with a public agency on contracts. Well that’s dumb because if I’m doing it on a private sector, that should be able to count towards what I’m bidding on here.” [#48]
- The non-Hispanic white male owner of an SBE-certified consulting company when asked if there are any non-price factors that act as a barrier to working in the public sector said that when acting as a prime there is a “time burden.” He stated that the time spent becoming familiar with the project and preparing a proposal requires a huge investment of time. He added that as a subcontractor the time burden is not as great. [#44]
- The non-Hispanic white female owner of a DBE-certified consulting firm stated that the staff-hours and fees required producing a bid affect her firm’s ability to bid on, or produce high quality proposals for, projects. [#39a]

**Timely payment by the agency or prime contractor.** Interviewees often mentioned slow payment or non-payment by the customer or prime contractor as a barrier to success in both public- and private-sector work.

**Many interviewees said that slow payment could be damaging to companies.**

Interviewees reported that payment issues might have a greater effect on small or poorly capitalized businesses. [e.g., PF#16, WT#14, WT#17, WT#32, #3, #4, #5, #9, #14, #16, #18, #20, #22, #23, #35, #39a, #44, #48, #50, #53, #54, #55, #56] For example:

- When asked if primes pay him in a timely fashion, the Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm responded, “No, hell no. [We typically wait] over 120 [days. The prime gets] paid [and] they just wait. They just love to wait you out. They wait...until there’s nothing left, and then you have to fight them for late fees and everything else.” [#10]

- The non-Hispanic white male owner of a construction-related firm said, “The biggest problem with bidding on government work is the payment schedule. I typically have to do all the work, supply money, supply materials.” [AV#31]
- The female Subcontinent Asian American representative of a specialty-consulting firm reported that working with large multinational or international firms is challenging since the large firms can afford to receive delayed payments, but their small subcontractors cannot. [PF#12]

The same business representative offered, “If Caltrans can help through their T-money or any other funding authority to enforce payment in a timely manner...that would help...small businesses.” [PF#12]

- The Hispanic American male owner of a DBE-certified construction firm reported that his firm faces challenges with cash flow when Caltrans does not pay in a timely manner for change orders. He remarked, “...Caltrans can’t make a payment until they make a change order...but they want the work done.... We don’t have the cash flow to keep going, to finance other work.” [PF#14]
- The Hispanic American male representative of a DBE- and SBE-certified specialty supply firm commented, “Getting paid would probably be the biggest challenge. [We typically] pay our vendors before...[we] are paid. So there’s always that possibility that...we’ve funded a job and then we don’t get...paid for it.” [#11]

The same business representative added that “...one nice thing about Caltrans [is that] we know when [the prime got] paid.... We know they submitted our progress payment...[now] where’s our money....” [#11]

- The non-Hispanic white male representative of a general contracting firm reported that timely payment by the agency has “always been slow.” [#26]
- The Hispanic American male owner of a construction-related firm said, “Caltrans is very hard to work for. They don’t pay you the actual cost of the work, time and materials. They cut it down. You don’t make money working for Caltrans as a sub. You have to wait 60 days to get paid.” [AV#32]
- The non-Hispanic white female owner of a WBE-certified specialty construction firm said, “It’s a problem; it’s a big problem. It is worse now than it has ever...ever been. I went knocking on doors [recently]; I was on a rampage and I think the cities are taking too long to pay. They are taking, like, six months. That is bad. That is hard for a subcontractor.” [#7]
- The female owner of a DBE- and WBE-certified specialty service firm reported that untimely payments from Caltrans has been challenging for her business. She said, “[Caltrans] projects I worked on in December were not paid until July or August. This is not helpful to a DBE.” [WT#30]

- The Black American male owner of a DBE-, MBE-, and CPUC-certified specialty construction firm stated that timely payment is critical to small businesses' ability to remain in business. He said small businesses "need to take advantage" of quick pay programs in contracts. [#47]
- The non-Hispanic white female owner of an SBE-certified specialty contracting business stated that some primes "don't pay well." She said, "They drag the process out and then just when you're going to get paid they [claim there is paperwork missing.] They do it intentionally, and I've seen this over and over and over." [#24]
- The non-Hispanic white male representative of a general contracting company reported that payment from public agencies is generally timely for work included in the contract. However, he said that when it comes to changes in the contract payments could become problematic. He noted that there have been times he has waited over 120 days because the agency's approval process for contract changes takes so long. [#41]
- The non-Hispanic white male owner of a concrete inspection agency noted that timely payment by the agency is critical. He said, "I pride myself that I pay my employees within a week or two at the very, very most. That's regardless if I get paid." He stated there have been occasions where he paid his employee and never collected payment for the job. "So I'm out, you know, three or four hundred bucks because I went out of my way." [#59]
- The Black American male owner of a DBE- and MBE-certified construction company commented that timely payment by the agency is ideal as a prime but not so much as a sub. He indicated that he has eaten some costs in the past due to non-payment. [#60]

**Some interviewees said that untimely payments are not an issue or they have determined methods of dealing with payment delays.** [e.g., #17, #33, #38, #45a, #51, #52, #57, #58] For example:

- When asked about timely payment by the agency or prime, the non-Hispanic white male owner of an architecture-related consulting firm stated, "It varies. Some are good...some are not good. And it doesn't matter to us, as long [we are] bringing in a certain amount every month." [#30]
- The Black American male owner of a DBE- and SBE-certified contracting firm commented that timely payment by the agency has not been a problem; Caltrans, specifically, pays on time. [#61]

Regarding other public agencies, the same business owner suggested that they consider the effects of slow payment when budgeting for projects. He said, "Your advance billing, your ability to pay, affect your outcomes. If you are not paid on time, that can cost you possibly 30 percent more in business."



Consideration should be given by agencies because the late fees rack up cost of doing business.” [#61]

- The Black American male owner of an MBE-certified trucking firm when asked about timely payment by the agency or prime reported, “...the companies that I work for now, I haven’t had [any] issues. The only time I had an issue [was] with Caltrans.” He reported that Caltrans has “a 60-day turnaround” on payment, which is difficult for his firm. [#25]
- The non-Hispanic white male owner of a specialty contracting business said if the agency or prime has a history of running late with payment, “you factor that in” to your bid. [#31]
- The Black American male owner of a specialty contracting business reported, “All the government jobs that I’ve had have paid right away and I’ve had really good experiences with the engineers and generals that I’ve worked with in the government field.” [#27]
- The Black American male representative of a general contracting firm stated that his firm assists DBE subcontractors with payments. “We do mobilization payments, or if we need to, pay them more often than once a month. [We pay them] usually within five to ten days.” [#26a]
- When asked if her firm has ever had issues receiving timely payment, the Hispanic American female owner of a WBE-, SBE-, and MBE-certified general contracting firm said, “Sometimes with the City [there have been issues].... Overall, no.... I’ve been very fortunate that any federal jobs that we’re doing, any State jobs, we get paid on time so – or within the time frame that we’re supposed to get paid, so I like those jobs.” [#13]
- The non-Hispanic white male owner of an SBE-certified specialty contracting company stated that untimely payment is not a problem. He said, “We know they’re going to be 45 days....” [#32]

**Any additional disadvantages or barriers associated with being a minority- or woman-owned small business.**

- The female principal of an engineering firm and representative of a woman-owned business joint venture expressed the concerns of her joint venture partner, a principal of a DBE- and WBE-certified engineering firm, and herself, regarding barriers and challenges they faced with bidding on a Caltrans project that has resulted in legal action. [WT#36]

The same representative reported that the woman-owned joint venture experienced discrimination since Caltrans awarded a contract, based on unfair scoring procedures, to a male-owned firm who were less qualified. She remarked, “Caltrans appears to have no intention of correcting the grave error

they made in the original unfair scoring or the fraud committed by Caltrans staff....” She added, “That is evidence of discrimination on the basis of gender and retaliation for those discrimination victims taking Caltrans to court over the unfair scoring, which favored a male-owned business.” [WT#36]

**Other business owners did not report any additional disadvantages.** [e.g., #23]

## **F. Other Allegations of Unfair Treatment**

Interviewees discussed potential areas of unfair treatment, including:

- Denied opportunity to bid (*page 109*);
- Bid shopping and bid manipulation (*page 110*);
- Unfair treatment by prime contractors, agencies, and customers during performance of the work (*page 113*);
- Unfair treatment by prime contractors and agencies regarding approval of work (*page 116*);
- Unfavorable work environment for minorities or women (*page 117*);
- Any disadvantages for small businesses regarding these issues (*page 118*); and
- Any double standards for minority- or woman-owned firms when performing work (*page 118*).

**Denied opportunity to bid.** The interview team asked business owners and managers if they have ever been denied an opportunity to bid.

**Some interviewees said that they have been denied an opportunity to bid on projects. Some specifically attributed the denial to discrimination.** For example:

- The president of a DBE-, SBE-, and MBE-certified engineering and construction firm commented, “Midsize firms...resent minority firms and won’t work with them.... Large firms are masters at keeping the work DBEs can do....” [WT#11]
- The non-Hispanic white male owner of an engineering firm commented that his firm experienced denial of the opportunity to bid is because it is not a minority- or woman-owned business. [#42]
- The Black American representative of a minority trade organization said that members of his organization have reported denial of opportunities to bid. He said, “There are a lot of cases mostly in the private sector.” [#52]

**Some interviewees indicated that they experienced an indirect denial of opportunity to bid.** For example:

- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm when asked if his company has experienced denial of an

opportunity to bid responded “Not directly. Well, I do know of it, but [the prime] wouldn’t put it in writing.” [#10]

- The Native American male owner of a DVBE-certified transportation firm commented that he has experienced denial of an opportunity to bid indirectly. He explained, “Well there are certain people out here that have been doing a certain work for a long time. With that, I have encountered limitations.... The limitations have been legal and there is nothing I can do about it. Nobody will ever say no to you because they know they will be sued.... It was not ever direct. It is never directly. It’s indirectly.” [#57]
- The non-Hispanic white male representative of an SBE-certified engineering firm commented, “...I think sometimes, especially with Caltrans, I don’t get the sense that small businesses are welcome. I get the sense that...that it is the big boys they want to use....” [#28]
- The Black American male owner of a DBE- and SBE-certified construction-related firm indicated that he suspected he had but was not certain. He said, “If there was [a denial of opportunity to bid], they are not going to tell you that up front. They are too smart.” He commented, “You can pretty much tell.” He stated that “it might be [and] it might not be. I can’t say if it is or isn’t, but [I] get strange feelings sometimes.” [#19]
- The Hispanic American female owner of a WBE-, SBE-, and MBE-certified general contracting firm reported that the only times that her firm could have lost the opportunity to bid is when primes want to self-perform on projects thus preventing her from an opportunity to bid on the project. Overall, she has not experienced the denial of opportunities to bid. [#13]

**Most interviewees indicated that they have not experienced or have no knowledge of denial of opportunities to bid.** [e.g., #3, #7, #9, #11, #12, #16, #17, #18, #20, #21, #22, #23, #24, #25, #26, #27, #29, #30, #31, #33, #35, #37, #38, #39a, #40, #41, #43, #44, #45a, #46a, #47, #48, #49, #50, #51, #53, #54, #56, #58, #59, #60, #61]

**Bid shopping and bid manipulation.** Business owners and managers often reported being concerned about bid shopping, bid manipulation, and the unfair denial of contracts and subcontracts through those practices.

**Many interviewees indicated that bid shopping and/or bid manipulation exists or felt that it might be prevalent.** [e.g., #5, #9, #15, #30, #32, #38, #39a, #40, #43, #44, #48, #52, #54, #55, #56, #57, #60] For example:

- The non-Hispanic white male owner of a specialty construction firm stated that there is a lot of bid shopping that happens because of the economy. He stated that as a contractor you learn as you go. [#37]

The same business owner, regarding bid manipulation, reported that a prime contractor asked him to increase his quoted price simply so they could make more money from the client. He noted that he stopped working with that company because they were not being honest. [#37]

- The non-Hispanic white male owner of a specialty construction firm said, “I think [bid shopping and bid manipulation] happens. I know school districts that had some board members that were getting bribes and things. We’ve all read it in the paper.” [#18]
- The non-Hispanic white male representative of a general contracting company said that his firm has not experienced bid shopping in the public sector. [#41]

The same business representative reported that his firm has experienced bid shopping in the private sector, adding that “doing private work is not an open forum.... It is not an open and honest process.” He added that owners in the private sector would tell a contractor or subcontractor “if you really want this job, you got to cut your price.” He also said, “[Private sector customers are] playing this game trying to drive the pricing down...and eventually, go and give their favorite firm a last look and said, ‘Okay. Here is the best price down on the street. If you want to do the work, you got to beat that.’” [#41]

- In discussing bid shopping, the Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm reported that every bidder completes an “ethics document” as part of a bid; however, the document is not enforced. [#3]
- Regarding bid manipulation, the non-Hispanic white male owner of an SBE-, DVBE-, and SDVOSB-certified consulting firm reported that he has experienced bid manipulation. He said, “You can read the scope of work and you know it’s written for a particular company. We’ll see some of those maybe six or more a year.” [#45a]
- The non-Hispanic white female owner of a WBE-, SBE-, and DBE-certified specialty construction firm stated, “I know one particular company [that] I’m positive they share my bid price with [my competitor] because they always use [the competitor].” She said, “I’m not even going to...worry about it because I think they just shop my bid around.” [#22]

The same business owner added, “I just really do think that [bid shopping] exists. Everybody swears that it does not exist. I think that it does.” She said, “There’s so many unscrupulous things that people do.” [#22]

- The non-Hispanic white male owner of a SBE- and DVBE-certified specialty construction firm, regarding bid shopping or bid manipulation, responded,

do not name the [sub] contractors.... They say, your bid has to be in by a certain date. You turn the bid in. They don't name you; all they do is use your bid to shop your bid to go see if they can get a lower bid." [#8]

The same business owner added, "And you say, 'Well, what the hell's going on?' If the system's going to be so unfair that when I turn my bid in, all I'm doing is bother? [#8]

- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm said, "When you submit a bid to a prime, they change your bid. [This] happens a lot. When they send you back a contract, it is all different. The wording, the exclusions, the inclusions are all different. And they all do it...." [#10]
- The Hispanic American male representative of a construction-related firm commented that since DBE subcontractors are not listed by name on a bid, "Contractors then bid shop after bid opening, renegotiating itemized lump sum items and hourly rates with their favorite...firm, usually a large firm with deep pockets or a small majority firm they have a relationship with." [WT#8]

The same business representative added, "...the effect is to impede the DBE firm from acquiring work through a fair bidding process." [WT#8]

- The Black American male owner of a DBE-, MBE-, and CPUC-certified specialty construction firm stated he "only had a feeling" that he has experienced bid shopping, but he has nothing definitive to substantiate his claim. [#47]
- Regarding bid shopping, the non-Hispanic white male owner of an SBE-certified specialty contracting business said, "They try to chisel you down on your numbers, on your profit." He added that he has not experienced bid manipulation. [#35]
- The Black American male owner of a DBE- and MBE-certified construction company reported that he was aware of bid manipulation. He said that many times they call for quotes and ask if he can do the job for a cheaper rate. [#60]

The same business owner also stated that while he was aware of bid manipulation, he was unaware of it ever happening to him. [#60]

**Many interviewees reported that bid-manipulation and bid shopping are not prevalent.** [e.g., #7, #12, #13, #16, #17, #19, #20, #23, #24, #25, #29, #31, #33, #34, #42, #46a, #49, #50, #51, #53, #58, #59, #61] For example:

- The Hispanic American male representative of a DBE- and SBE-certified specialty supply firm said, "It sounds like in the past we've had

some...situations with [bid manipulation, but] less so recently because [Caltrans posts] the post-bid files.” [#11]

- The Black American male owner of a specialty contracting business stated, “I’m sure that someone has done that before, but I don’t know an actual instance when it happened.” He said, “If someone else wants to do it cheaper than [me], then I know that they’re cutting corners somewhere...or they’re just taking it out of their profit which I’m not willing to do.” [#27]

The same business owner when asked about bid manipulation said he has “never had anyone do that....” [#27]

- The non-Hispanic white male owner of an SBE-, DVBE-, and SDVOSB-certified consulting firm stated, “I have not experienced bid shopping. I think that’s against the law in this state.” [#45a]

**Some interviewees reported that bid shopping is part of doing business.** For example:

- The non-Hispanic white male owner of an SBE-certified specialty consulting company said that they had only experienced bid shopping in the private sector. He said, “You know, in the private sector, [bid shopping] will happen, but that’s just part of the game you play.” [#29]

The same business owner added that, for his industry, there is no opportunity for bid shopping in the public sector because the discussion of prices [is] after a proposal is accepted. [#29]

**Unfair treatment by prime contractors, agencies, and customers during performance of the work.** Some business owners described their experiences with unfair treatment by contractors and customers during performance of work. For example:

- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm reported that when his firm works on a contract, after the amount of the contract is used, the prime uses someone else to finish the work. “We’ll go out and [work] twice, and then [the prime will say that they are using someone else now] because we wrote you guys down for \$6,000 and we’ve exceeded a \$6,000 amount, now we’re going to use this local guy.... They use us to meet the number and they send [us] along...on [our] way.” [#10]
- The Black American male representative of a minority trade organization when asked if his organization’s members have ever reported unfair treatment regarding approval of work answered, “Oh, absolutely. If there are problems on work performance, which happens, [prime contractors] try to hold back people’s money.... That is why our organization is good to be in place. We combat some of these issues and I look at the overall situation — I never want to leave it unaddressed. We get [it] resolve[d].” [#52]

- The Hispanic American male representative of a DBE- and SBE-certified woman-owned engineering firm reported that his firm had a three-year project, and the prime stopped using them after the second year. He said, “I think they hit their DBE amount by the second year so we didn’t get any work the third year.” [#23]

The same business representative reported that a prime his firm was working for once persuaded an employee of his firm to quit and work for the prime. After that, the prime did not have any more work for the interviewee’s company. He said, “What do we do...raise a stink? I mean, it’s not worth our time to really do anything.” [#23]

- The non-Hispanic white male owner of an SBE-, DVBE-, and SDVOSB-certified consulting firm stated that he has experienced unfair treatment by contractors and said, “Usually it’s the construction contractors. [Prime contractors] are always trying to cheat and they do not want to pay your fees. I wish there was somebody I could call and say, ‘Look, they picked up those DVBEs and now they don’t want to pay.’” [#45a]
- The Subcontinent Asian American male owner of a DBE-certified transportation services firm reported, “We are on the bottom of the food chain.... People don’t respect you a lot and you go to the job site and you know that people don’t talk nice to you. One time, my guy left the job. They disrespect you and yell at you. It happens...a lot. Truckers are the bottom of the food chain. They pay you [less] per hour because they know they can get away with that.... It can be very small, but we need that work.” [#54]
- The non-Hispanic white male representative of a general contracting firm reported that there are “periodic disputes between you and the [agency], but they’re just standard construction disputes; I have one opinion, they have another, but it’s not unusual.” [#26]
- The Black American male representative of a general contracting firm concurred saying “yeah. Nothing systematic.... It’s just case-by-case.” [#26a]
- When asked about unfair treatment by primes and customers during performance of work, the non-Hispanic white female owner of a DBE-certified consulting firm reported that she has worked with primes that “just will not keep you in the loop.” [#55]
- The Black American owner of a specialty contracting business reported that he experienced unfair treatment regarding the approval of work by a prime contractor. He said, “I did have...a bad experience with a general [contractor].” He said the general contractor “questioned my square footage and my linear footage at the end of the project and tried to pay me a lot less. He ended up not paying me in full at the end of the project.” [#27]

- The Black American male owner of a DBE- and SBE-certified construction-related firm reported that on a Caltrans project, the need for his service was underestimated. He said that the supervisor told him that he was not doing the job right; however, a Caltrans inspector was watching, and “she came over and [told me not to] let these guys talk. [She saw that] they needed another [company] out here.... She went and talked to them, and then they finally got another [company] out there.... [Prime contractors will] try to take advantage of you if you are a smaller company.” [#19]
- The non-Hispanic white male representative of a DBE-certified construction-related firm when asked about unfair treatment by primes during performance of work reported, “Yeah, in fact we have a situation going right now. It is not public, but private.... We have a contractor that doesn’t want us to do our job, which in turn, puts lives at risk. Yelling and demanding is not good practice.... So we have had a couple of conversations with the company trying to straighten it out. I learned again this morning that we’re not being very successful.... I think there needs to be a face to face at this time.” [#53]
- The non-Hispanic white male owner of a specialty contracting company stated that his firm was performing a job at a nationally known chain store, and he said, “It was probably my worst experience.” He said that the prime was “kind of a con [artist],” adding, “It was extremely long before I got paid.” [#51]
- The non-Hispanic white female owner of a DBE-certified consulting firm reported that she had experiences with unfair treatment by a prime on a job site where the prime accused her workers of wrongdoing. She said, “At almost every construction site, the prime, the trades always blame everybody else.” [#39a]

**Many business owners reported little or no experience with unfair treatment by contractors and customers during performance of work.** [e.g., #7, #11, #21, #24, #25, #28, #30, #32, #33, #35, #37, #40, #42, #43, #44, #46a, #47, #48, #49, #50, #58, #60, #61] For example:

- When asked if she has ever experienced unfair treatment by prime contractors, the non-Hispanic white female owner of a WBE-, SBE and DBE-certified specialty construction firm reported, “I don’t think they do it on purpose. I think it is just part of doing a project. I think there is a lot of hurry, hurry....” [#22]
- The non-Hispanic white male owner of a specialty contracting business when asked if he has ever experienced unfair treatment during the performance of the work reported that rudeness from customers is rare, but it does happen. He said that when it happens, “You need to be professional.” [#31]
- When asked about treatment by primes and customers during performance of work, the non-Hispanic white male owner of a concrete inspection agency stated that it has been very favorable. He noted that he knew of a few



contractors who try to manipulate the code or the system without much regard for safety, which is his job's main objective and responsibility. "So, there have been issues with a few of them... They just want to get the job done as cheaply as possible and don't really care." [#59]

- The Black American male owner of a DBE- and MBE-certified construction company noted that unfair treatment by primes and customers during performance of work happens sometimes but not so much when you are the lead. [#60]

**Unfair treatment by prime contractors and agencies regarding approval of work. Some business representatives experienced unfair treatment.** [e.g., #19, #55] For example:

- Regarding unfair treatment of approval of work, the Black American male owner of a DBE-, MBE-, and CPUC-certified specialty construction firm stated he has not had a problem with a prime contractor approving his work. However, he said that he once had a problem with a city inspector who did not want to approve the work his company had performed. He noted that he had to contact the inspector's supervisor to resolve the matter. [#47]
- The non-Hispanic white male representative of a general contracting company reported that his firm experiences unfair treatment regarding approval of work in both the public and private sectors. He added that "many of the [public] agencies tend to be really fair if they have money in the bank and they've got plenty of contingency left, but when they're out of contingency all of a sudden the answer is no." [#41]
- When asked about unfair treatment regarding approval of work, the Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm reported an issue "with a prime...because they wouldn't pay us.... We sat down at the table, [I] brought a crap-load of documents [and explained how we had performed the work and they had signed it]. I don't understand.... You show me weeks later...a job log.... Your guys signed off on the project that everything was done the way it was supposed to, now you guys are coming back weeks later [and claiming it didn't work right]. Well, I'm sorry, that [it] doesn't work." [#10]
- The non-Hispanic white male owner of a concrete inspection agency indicated that there have been times of unfair treatment regarding work approval by primes, but it is not often. [#59]

**Others did not report experiencing unfair treatment by prime contractors or agencies regarding approval of work.** [e.g., #11, #39a, #45a, #46a, #48, #49, #50, #51, #58, #60]

**Unfavorable work environment for minorities or women.** Interviewees were asked about any experiences of unfavorable work environments for minorities or women.

**A few interviewees reported experiences working in unfavorable environments for minorities or women.** [e.g., #60] For example:

- The Hispanic American male representative of a DBE- and SBE-certified woman-owned engineering firm stated that “it’s always a little bit tough [being a woman] working in...the construction industry. It’s still [a] manly industry.” He said there is a “sexist attitude [from] the workers out there.” [#23]
- The Black American male owner of a DBE- and SBE-certified contracting firm said that he has experienced unfavorable work environments. He said that he gets “an impression that you are inferior. Although you are meeting the requirements of the job such as time, quality, [etc.], you get a letter saying that you need to have more men in the field from their opinion. Those things are a distraction because whereas you should be focusing on the advancement of the business, you’re focusing on the existence.” [#61]

**Some interviewees reported no experience with unfavorable work environment for minorities or women.** [e.g., WT#34, #10, #20, #21, #27, #30, #38, #39a, #40, #42, #43, #44, #45a, #47, #48, #51] For example:

- The non-Hispanic white male representative of a general contracting firm stated that they “don’t tolerate” any unfavorable work environment for minorities or women. [#26]
- The non-Hispanic white male owner of a concrete inspection agency commented that “there are unfavorable work environments on certain jobs, but it’s not because of being a woman or minority.” [#59]

**A few Interviewees described methods of dealing with unfavorable work environments.** For example:

- The Black American male representative of a minority trade organization stated that his organization encouraged its members to speak out about mistreatment telling them, “If you feel that the environment is unfavorable or not right, you have to say to us and speak up.” [#52]
- The Subcontinent Asian American female owner of a DBE- and LWBE-certified engineering firm stated, “...when I notice something like that I just have to step over it. I am too busy to deal with that. Prejudice against race or gender, you can’t fight it....” [#50]

**Any disadvantages for small businesses regarding these issues.** Some interviewees indicated that some of the issues are because their businesses are small or exacerbated because they are small business owners.

- The Hispanic American male owner of a specialty contracting business reported that large firms substitute contractors, other than those used on their bids, on projects. He said, “They use a loophole in the rules to their advantage, and...under the present government and agency...the large contractors give lip service to the rules....” [WT#35]

**Any double standards for minority- or woman-owned firms when performing work.** Interviewees discussed whether there were double standards for minority- and woman-owned businesses.

**Many business owners and representatives reported double standards based on race, ethnicity, or gender. For example:**

- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm reported a double standard for DBE certified firms. Prime contractors use DBE’s to meet contract goals, then say, “We’ve met that goal with her, now we can get...we can get who we really want to get.” [#10]
- Regarding double standards, the Subcontinent Asian American female owner of a DBE- and LWBE-certified engineering firm stated, “Maybe sometimes. If they see they can take advantage of you, especially the Project Manager, they will. If they perform professionally then it will not happen.” [#50]
- Regarding double standards, the Black American male representative of a minority trade organization commented, “...I see women never treated right. They [are] just like Blacks; they [are] never treated right, in my opinion.” [#52]
- The Black American male owner of a DBE- and SBE-certified contracting firm when asked if there are double standards for minority- or woman-owned firms when performing work responded, “Yes, we’re going to go through a scrutiny. [The agency] may see you as being inferior because you do not have 10 trucks pulling up when a job really requires one. You do not have ten people to bring to the site, when you only really need five. So, you end up being scrutinized because you’re lean and not showy.” [#61]
- The non-Hispanic white female owner of a WBE-, SBE-, and DBE-certified specialty construction firm reported her experience with double standards for women. She reported that they exist in handrail approval. She said, “We used to always laugh that it was fine as long as the guys were out there. As long as [clients] thought the whole shop...was being run by men.” She said, “Whether that handrail is signed off or not is [not] determined by whether I’m a female or not....” [#22]

- The Native American male owner of a DVBE-certified transportation firm commented, “...the only problem I see is with the DVBE. The DBE has an 8A program that is...unfair for the DVBE.... They should be able to have that type of help when they get started too. Like I would have enjoyed having an 8A program for Disabled Veterans because that would have helped me to grow. You’re just given contracts.” [#57]
- The Subcontinent Asian American male owner of a DBE-certified transportation services firm when asked about double standards for minority- or women-owned firms responded, “...people say the best minority is to be black and be a veteran.” [#54]
- The Hispanic American female owner of a MBE-certified specialty services firm indicated that she has experienced double standards, saying that the primary issue is that as a woman-owned business she must work harder to prove itself. [#5]
- The non-Hispanic white female representative of a general contracting company stated that she experiences double standards as a woman working in the construction industry. She said some people are a “little bit tepid until they understand that I know more than they do [about construction].” [#43]
- The non-Hispanic white female owner of an SBE-certified specialty contracting business when asked about any double standards for minority- or woman-owned firms stated, “I guess the double standard would be not getting the work. And I can’t document it, but I know that there’s a lot of behind-door dealings that go on.” [#24]
- When asked if she ever experienced double standards for minority- or women-owned firms when performing work, the non-Hispanic white female owner of a DBE-certified consulting firm responded, “Yes, but it’s usually subtle. It’s not usually blatant.” [#55]
- The Hispanic American male owner of a DBE- and MBE-certified specialty contracting company reported, “When we first started, we had to prove every step of the way we had the ability to do the work.” [#46a]
- The Black American male owner of a DBE- and MBE-certified construction company indicated that some people don’t think that minority- or woman-owned firms are qualified to perform the work. [#60]

**Other business owners did not report that double standards exist.** [e.g., #11, #12, #25, #26, #27, #30, #38, #39a, #40, #42, #44, #47, #48, #49, #51, #53, #56, #58, #59]

**Some interviewees reported that double standards exist for non-minority and non-woman-owned businesses.** For example:

- The non-Hispanic white male owner of an SBE-certified specialty contracting business said that he has noticed double standards for minority- and woman-owned firms and feels it is harder for his firm to obtain work because it is not DBE-certified. He said, “I feel like the white man is the minority out there.” He added, “The biggest problem is that I’m not a minority. I’m a white boy and that seems to be the downfall.” [#35]
- The non-Hispanic white male representative of a general contracting company when asked if there are any double standards for minority- or woman-owned firms when performing work said that his firm is held to a higher standard than minority- and woman-owned businesses. He said, “We show up for work ready to go...and [minority and disadvantaged businesses] are discombobulated, and the owner gives them a lot more grace than they give to us.” [#41]

## **G. Additional Information Regarding any Race-/Ethnicity- or Gender-based Discrimination**

The study team asked interviewees about whether they experienced or were aware of other potential forms of discrimination affecting minorities or women, or minority- and woman-owned businesses. This part of Appendix D examines their discussions of:

- Any stereotypical attitudes about minorities or women (or MBE/WBE/DBEs) or reports of discrimination (*page 120*);
- Any “good ol’ boy” network or other closed networks (*page 122*);
- Any allegations of unfavorable treatment based on race/ethnicity or gender (*page 127*);
- Reports of sexual harassment (*page 130*);
- Reports that the interviewee had not observed race-/ethnicity- or gender-related discrimination (*page 130*); and
- Factors that affect opportunities for minorities and women to enter and advance in the industry (*page 131*).

**Any stereotypical attitudes about minorities or women (or MBE/WBE/DBEs) or reports of discrimination.** A number of interviewees reported stereotypes that negatively affected minority- and woman-owned firms. [e.g., #22, #43, #50, #52, #60] For example:

- The Black American male owner of a DBE- and SBE-certified contracting firm commented that he has experienced an agency staffer that shunned him while picking up plans for a project. In the exchange, the staffer gestured to him in a manner that expressed a preconceived opinion of his capabilities. He added

that the staffer gave him the wrong plans to deter his intentions of bidding. [#61]

- The Black American female owner of a DBE- and SLBE-certified construction-related business said, “As a woman, I still face stereotypes.” She added that she is asked questions like, “‘What are you doing out here?’...‘Where is your husband?’ or ‘How come you are not home with your kids?’” [#48]
- The Black American female owner of a new construction-related business stated that she has encountered stereotypical attitudes about women and minorities. She said, “Even in my time working [at my previous firm], going into meetings...a lot of people did not take me serious until I made them.... In six months I got them over \$100,000 in contracts.... So this is what I love, and...that’s the way I shut them down, shut [them] up.” [#2]
- The non-Hispanic white female owner of an SBE-certified specialty contracting business when asked about stereotypical attitudes about minorities or women reported, “The mentality is that the minority or women aren’t capable. And that’s where we have to prove that we can...walk the walk and talk the talk.” [#24]
- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm stated that “one of the project managers from [a large prime contractor] told me once [that] the only reason [that contractor was using us] is because [they] have to. That’s it, flat out.” [#10]

Regarding stereotypical attitudes, the same business owner added that he commonly encounters “the normal [stereotypical attitudes]. Run-of-the-mill ones that have been going on for years.... You get the jokes every now and then...‘Is the concrete [guy going to be on] time today?’” [#10]

- A female owner of a certified specialty service firm remarked that primes’ and agencies’ perceptions of DBE- and SBE-certified firms needs to change. She said, “We still walk into a room and they think that we woke up yesterday and decided we were going to start a business.... They are not [seeing] that we are professionals.” [PF#9]

The same business owner added, “...in terms of skill set, we are on a level playing field.... In terms of opportunities it’s still very unequal.” [PF#9]

- The Hispanic American male representative of a DBE- and SBE-certified woman-owned engineering firm reported that he has seen stereotypical attitudes about women in the construction industry. He said, “Nothing’s really changed.” He said, “You can tell [some men] just don’t have the respect [for women].” [#23]

- The non-Hispanic white female owner of a DBE-certified consulting firm stated that she has experienced unfavorable treatment by a public agency based on gender. She explained, “Yes, I have had experiences. They are mostly when I dealt with men.... Going in front of a board of supervisors or political body where they prefer not to have a woman especially with — I’ll be biased myself — older men, saying what needs to be done or giving them the answer to a question. It is okay if a man will say the same thing to them. But if a woman says it in the nicest possible way, they don’t like that.” [#55]

The same business owner added, “When I first started out, I experienced stereotypical attitudes....” She said, “It was, ‘oh, well let’s just put you on the team because you’re one of those women owned businesses and we need the extra points.’ Now, it is much less than that. It is more, ‘We’re hiring you because you have a reputation that’ll get us the contract.” [#55]

- The Black American male owner of an MBE-certified trucking firm stated that he sees stereotypical attitudes about minorities “all the time.” [#25]
- When asked if there are any stereotypical attitudes about minorities or women, the Black American male owner of a DBE- and SBE-certified construction-related firm responded that there are “100 percent.” He added, “There is nothing that is in your face out there, but [there are] people that talk big...and if you have friends, then you know what people are saying behind closed doors or when you are not around.” He commented, “...there is always going to be that challenge.... This is just part of life and overcoming whatever it is, whatever obstacles you got.” [#19]
- The non-Hispanic white male owner of a concrete inspection agency commented, “There are people who are racist and if you’re not of their ethnic background, then yes, you will be treated differently no matter who you are.” [#59]

**Some business owners reported no recent experience with stereotypical attitudes about minorities or women (or MBE/WBE/DBEs).** [e.g., #28, #30, #39a, #40, #41, #42, #44, #45a, #46a, #47, #49, #51, #53, #54, #56, #58]

- The non-Hispanic white female owner of a DBE-, SBE-, and WBE-certified specialty contracting firm commented, “No, I haven’t had any unfavorable treatment.... It’s much better than it was when I got in the business back in [the late 1970s]. It was obvious then, but not now. I don’t see it.” [#38]

**Any “good ol’ boy” network or other closed networks.** There were many comments reporting the existence of a “good ol’ boy” network or other closed networks. [e.g., #14, #19, #22, #32, #38, #39b, #45a, #52, #53, #54, #57, #58] For example:

- When asked about “good ol’ boy” networks, a non-Hispanic white male owner of a specialty construction firm stated that he was not aware of anything

official. He added that “maybe back in the day there may have been more [closed networks], but sometimes you’re just comfortable working with who you know.” He reported that, especially in his industry, which is “all I know about...you just get comfortable with your team.” [#37]

- The non-Hispanic white female owner of a DBE-certified consulting firm when asked if she ever encounters any “good ol’ boy” or other closed networks, responded, “Yes. I have experienced the network with every supervisor, every county commission, city council, I have ever worked. Yes, especially in rural areas, the closed networks exist.” [#55]
- Regarding the existence of “good ol’ boy” networks, the Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm reported, “Oh, yeah...every day in this business...we send out probably 100 bids a week and we get maybe one [job] out of 500. It is because we are a minority more than likely.... It is because it is a threat, I think, for [many] general contractors...that’s why they really put so much emphasis on the good faith effort because the good faith effort acts like a shield. [The prime can say they’ve] crossed all the T’s and dotted all the I’s [and] contacted everyone on this thing and none of them are qualified to do the work. It’s [unfair].” [#10]

The same business owner commented, “It’s still good ol’ boy’s network, and that’s the toughest thing...and if there isn’t someone standing over these guys saying that (they) have to make sure you include everybody in this deal they’re not going to do it. I mean, they just won’t.” [#10]

- The non-Hispanic white male owner of an engineering firm explained, “One of the struggles is getting your foot in the door with Caltrans, even if you have recent of current experience with the department.” [AV#22]
- The Hispanic American male representative of a DBE- and SBE-certified specialty supply firm reported being unsure whether closed networks have affected his firm or not. He said, “Sometimes we feel that we don’t know what’s going on because [when we go] back to the post-bid file [we see that] the second or third or fourth bidder out lists us as far as doing the work, but why didn’t the low bidder list us?...Sometimes we have never done work with a contractor. [It’s usually tied into the good faith efforts] where they never even contacted us, even though [we had] opted in with the contract.... We don’t understand.” [#11]
- The Black American female owner of a DBE- and SLBE-certified construction-related business commented, “[Closed networks are] prevalent here in Southern California. That is how it is apparently. There’s [a] good old boy’s network. You don’t get in unless you know somebody or somebody refers [you].” [#48]



- The non-Hispanic white male owners of a consulting-related firm said, “The bid process tends to favor the incumbent. It’s hard for a small business to meet requirements, so there is low chance for success.” [AV#23]
- When asked if she has seen any indication of “good ol’ boy” or closed networks, the non-Hispanic white female owner of a WBE-certified specialty construction firm stated, “I don’t see it because I mind my own business. I am way out here and do not have to put up with it. I think it still goes on.” [#7]
- The non-Hispanic white male owner of an SBE-certified specialty consulting company , “I think at some point, they’re only closed because the blood stays in there too long and people get too reliant on, ‘I trust this guy.’” [#17]
- When asked if he has experienced a “good ol’ boy” network, the Hispanic American male representative of a DBE- and SBE-certified woman-owned engineering firm stated it “is still around definitely.” When he attends events, he sees members of a “good ol’ boy” network “having drinks off to the side [and] having their conversations.” He said, “It’s [harder to] network with these guys because...they’ve been doing this for 50 years...and they’re set in their ways.” [#23]
- The Hispanic American female owner of a WBE-, SBE-, and MBE-certified general contracting firm when asked if she has ever experienced a “good ol’ boy” network stated, “I felt that in the beginning. I felt that because I was a woman they were not giving me opportunities, but not so much now. I do not see that so much now because my guys do end up being the main guys that they contact. They’re not dealing with me, so I think that makes a difference.” [#13]
- The Black American male owner of an MBE-certified trucking firm indicated that the “good ol’ boy” network is “very much” alive. He said, “You’ve got to be better than the “good ‘ol boys” so they have to hire you.” He said, “You really have to be good at what you do.” [#25]
- The non-Hispanic white male owner of an architecture-related consulting firm indicated that he is unaware of any “good ol’ boy” network in San Francisco, but noted that there are such networks in other areas. He said, “...in Bishop, somebody would say [that] there’s a total “good ol’ boy” network. In fact, it is...completely dominated by three landscape architects and two contractors that get all the work. Which is actually true.” [#30]
- When asked about “closed networks,” the female representative of a CPUC WBE-certified specialty construction firm reported that they encounter this issue; and, it exists in many industries, such as petroleum and construction. When asked how they deal with closed networks she responded, “We haven’t been able to.” [#16]

- The non-Hispanic white female representative of a general contracting company said, “There’s always a good ol’ boy network.... [The construction industry] is word of mouth, who you know and there is a little arm twisting in some of that.” [#43]
- The Black American male owner of a DBE- and MBE-certified construction company reported that he was aware of the existence of “good ol’ boy” networks but that he has not run into any difficulties because of them. [#60]

**Some firms report being members of a “good ol’ boy” network or finding them helpful to business.** For example:

- The non-Hispanic white female owner of an SBE-certified specialty consulting company when asked if there is a “good ol’ boy” network said, “I consider myself a part of it....” [#20]
- Regarding the existence of “good ol’ boy” or other networks, the Hispanic American male owner of a specialty contracting business reported, “I find it hard to be that victim, to be honest with you. I think that there’s a place for relationships in this industry and sometimes you’re on the right side of that, and sometimes you’re on the wrong side of it, and it is what it is.” He said, “I think that when people develop a sense of comfort working with a particular sub because they’ve had a previous pleasant experience, I think that it kind of validates a desire for them to work with that company.” [#9]
- The non-Hispanic white male representative of a general contracting company when asked if there are any “good ol’ boy” networks or other closed networks said, “I don’t think so because we have become...the good ol’ boy network was definitely there thirty-five years ago in a lot of different ways. But now, with non-collusion laws and so many other like just the straight competitive in our industry now, there’s not a lot of discussion like that.” [#41]

**Some interviewees indicated that closed networks are unavoidable.** For example:

- The Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm stated that while “[closed] networks” exist, she does not agree with the mindset of certain women that feel like they are “owed” the business. “There should be no entitlements, other than being paid.” [#3]
- The Native American male owner of a DBE-certified construction-related firm said, “...that does exist and unfortunately.... I don’t care how hard you try to restrict that [good ol’ boy network], it’s going to happen.” [#49]
- The Black American male owner of a DBE-, MBE-, and CPUC-certified specialty construction firm stated that many times what may appear to be “good ol’ boy” networks are actually close personal relationships. [#47]

- Regarding closed network, the non-Hispanic white male owner of an SBE-certified consulting company said, “It’s my understanding that is how everything operates....” He added, “The more I learn...I see how it works. That is not to say that women and minorities cannot be part of that good ol’ boy network.... They seem to be as well. It is about who you know.... You don’t have to be an old boy to be part of this.” He went on to say that “there is that network of who you know...handing out work...and it’s not necessarily old white men.” [#44]
- The Black American female owner of a new construction-related business stated that she has seen closed networks in her field, “What it is, is that [firm owners] know each other, they’ve been dealing with each other, they go play golf with each other, you know.” She added that closed networks are less of a problem in the public sector saying, “Caltrans, they make it pretty fair, you know with just even helping us, you know minorities.” [#2]
- When asked if he has experienced any “good ol’ boy” or other closed networks, the Black American male owner of a DBE- and SBE-certified contracting firm responded, “I see there are strong relationships in [the construction] business where people do things because they know you. You’re going to do [helpful things] for your friend for whatever reason.” [#61]

**Some interviewees reported having never encountered closed networks or thinking that closed networks are becoming less pervasive.** [e.g., #5, #18, #33, #40, #42, #46a, #51, #59] For example:

- The Black American male representative of a general contracting firm when asked about any experiences with a “good ol’ boy” networks indicated that his firm does not see that. He said, “There’s just a lot of pressure to be a professional contractor. I think our people are mostly focused on operating within the law and making money for our shareholders.” [#26a]
- The Black American male owner of a specialty contracting business said, “Sometimes I get the feeling [that] there’s kind of a “good ‘ol boy” type situation, but I think that the older that I get, the less I’ve seen it and the less I’ve noticed it.” He said, “I haven’t really noticed anything firsthand, but it’s definitely a possibility.” [#27]
- The Subcontinent Asian American female representative of a minority woman-owned DBE-certified supply firm commented, “...I am a younger female in this large construction business. I think that the good old boy is going on but going out. It is not as prominent as it once was....” [#56]
- The non-Hispanic white male owner of an SBE-certified specialty contracting business stated, “I don’t know the good ‘ol boy treatment applies to me.” He said, “My reputation is what I live on.... I’m not hired back because I’m a good ‘ol boy. I’m hired back because my abilities.” [#35]

**Any allegations of unfavorable treatment based on race/ethnicity or gender.** Some interviewees had comments related to topics not discussed above. For example:

- The Black American male owner of a DBE- and SBE-certified contracting firm reported unfavorable treatment by a public agency that may have been racially motivated. He explained, “We had a contract...and we were solicited by the agency to complete some additional work that would have cost [the agency] a lot more money to formally bid.... I said ‘fine, we’ll do it.’” He added, “[When] time came for us to do the work, the agency decided that they would have another contractor come in and do the work.... They had the other contractor in the same yard where we’re doing our work. This other contractor...was invited to informally come in and take the additional work...performing the same function that we were doing. I mean, I can’t specifically say it was race, but I wouldn’t rule that out, what else could that be?” [#61]
- The Subcontinent Asian American female owner of a DBE- and LWBE-certified engineering firm reported, “You see very few Black firms or Black engineers....” [#50]
- The male representative of a public sector agency commented, “...when it comes to race and gender discrimination, I feel like in this day and age it’s a little bit harder to pinpoint, in the sense that in the past we had more blatant discrimination.” [PF#4]

The same representative of a public sector agency added, “...I think it’s more subtle and there’s more structural racism, whether it be through the contractors or consultant or the agency itself that lend to barriers.” [PF#4]

He added, “These days we have a lot of bias. So just by looking at somebody based on their race and/or gender, there’s certain things that we might perceive about them that might be negative.... We might treat them differently based on those preconceived notions....” He remarked, “And it can cut both ways. Minorities can do it to other minorities or white people as well.” [PF#4]

- The male owner of a DBE-certified specialty supply firm reported unfair practices in public works projects saying, “When [primes] usually reach out towards [us], the DBE, they are asking us what’s our race.... I think, it obviously doesn’t need to be disclosed.... Once it’s entered into a database, they can figure out what your race is....” [PF#11]
- The non-Hispanic white male owner of an SBE-certified consulting company stated that he has not personally witnessed any unfavorable treatment but noted that he has overheard sexist and racist comments in the field when visiting construction sites. [#44]
- The Hispanic American female owner of a specialty construction firm reported that sex discrimination is alive. She explained, “My industry is a male

dominated industry and there are sometimes, you know, people want to talk. They have questions about my product; they want to talk to somebody else because I am a woman. Yes. They say 'I want to talk to somebody...the owner,' and well, I am the owner. 'I want to talk to the other owner,' or like, 'Whatever owner.' It doesn't happen very often though." [#58]

- The Subcontinent Asian American male owner of a DBE- and MBE-certified engineering firm reported subtle discrimination. He commented, "...and when we talk about...the DBE and MBE...I don't see it as outright discrimination, but it's very, very, subtle." [PF#15]

The same business owner added that he had to change the name of his firm in hopes of getting prime opportunities. He commented, "...it is very hard to get prime work for — especially rural areas...." He added, "...I thought, this is not right...so we change our company name...and hire...[non-Hispanic white] engineers to be my employee manager...and we started to get quite a few prime jobs in the rural areas.... So that tell me something." [PF#15]

- The minority owner of a DBE-certified communications related firm commented, "...I do feel treated unfairly at times based on my race or ethnicity, however when one has been subjected to this form of behavior for so long a person becomes numb to things." [WT#27]
- The Black American male owner of a DBE-certified construction-related firm remarked that his firm was UDBE-certified and then changed to DBE-certified. He said, "The majority of primes are unwilling to work with minority firms (especially African American firms) unless there is a major incentive." Therefore, he suggested that in order "to rectify this anomaly would be to bring back race conscious goals...." He added, "This is an industry that is plagued with historical discrimination." [WT#28]
- The Subcontinent Asian American male owner of a DBE-certified engineering and construction-related firm reported that in the design realm he has no experience with disparity; however, in the construction management arena he indicated, "We are typically passed over in favor of non-DBE firms." [WT#16]
- The female owner of a DBE-certified construction-related firm reported if her firm is subject to unfair treatment due to race, ethnicity, or gender, it is not obvious due to a lack of government transparency. [WT#17]
- The Subcontinent Asian American representative of a minority woman-owned DBE-certified supply firm indicated that she is aware of allegations of discriminatory treatment. However, she noted, "I would say yes I'm aware of it and I've had people that I now consider friends in the business accused of it. The construction industry that I work, doing work for larger firms...they definitely have to be careful with what they're saying when it comes to allegations towards other people." [#56]

- The female owner of a DBE-certified construction-related firm commented, "...I have used the DBE and was low [bid] on the job [and] you still gave it away to the male contractor." [WT#18]

The same female business owner remarked, "When I am looking for work I just say [that] I am an assistant, not the owner.... I get more work that way." [WT#18]

- The non-Hispanic white male business representative indicated that he is "a minority group in California.... I have a disadvantage on bidding on contracts because my company is not 'minority- or women-owned'...so this is discrimination...." [WT#20]
- A representative of a specialty supply firm reported, "Caltrans is still [discriminating against] African Americans...there has not been an increase in opportunity." [WT#21]
- The Subcontinent Asian American owner of a DBE-certified engineering firm reported that he had an issue of discrimination in the public sector however not by Caltrans. He said, "They discriminate.... It happened in [the early 2010's] when I had a project with the Department of Boating and Waterways. [They did] not want to pay me. [They told me to file] bankruptcy. [I stopped performing the work because they were] not paying...me." He said that he had to hire an attorney and after [more than a year he] was able to win the case. [#12]

The same business owner noted that he felt discriminated against by the City of Sacramento. He said that he was not paid. He took this case to court, and it is still pending. He said that after [more than a year], he has not received "a single penny on that project from the City of Sacramento." [#12]

- The non-Hispanic white male owner of an architecture-related consulting firm reported no knowledge of unfavorable treatment that may be racial/ethnic or gender-based but stated that architecture in general is "not diverse at all." [#30]
- The non-Hispanic white female owner of a WBE-, SBE-, and DBE-certified specialty construction firm reported several experiences of unfair treatment from Placer County. She said that there were two jobs where she lost significant amounts of money. She said that she was informed, "That's what Placer County does to everyone." She said, "It was incredibly frustrating [and] in the end, I finished my part of the project and refused to do any more change orders and...they asked that I be removed from the job." She indicated, "I reported them to the Feds. I don't think anything was ever followed up on." [#22]

- The non-Hispanic white female representative of a general contracting company said that she has experienced unfavorable treatment that may have been gender-based. She explained that she is responsible for directing her subcontractors and that there have been instances on projects where she was not taken seriously because she is a woman. She stated that once subcontractors understand that she knows what she is doing, the gender-based issues usually go away. [#43]
- The non-Hispanic white male owner of a concrete inspection agency stated that he has experienced unfavorable treatment that may be racial/ethnic-based. He said that "...with some contractors, they prefer to work with their own kind and where I've sent someone that's not from their background, they're treated a little more harshly." He added that sometimes when working with a Hispanic contractor, "...if you can't speak Spanish you can't communicate with these guys. And so that's an issue." [#59]

**Reports of sexual harassment.** One business owner reported experiencing sexual harassment:

- The non-Hispanic white female owner of a WBE-, SBE-, and DBE-certified specialty construction firm said sexual harassment exists. She reported, "I've only had one event...where I've ever felt uncomfortable, and I immediately told my general contractor." She said that an inspector touched her and told her a very inappropriate joke. She said, "...I did not like the touching." [#22]

**Reports that the interviewee had not observed any additional race-/ethnicity- or gender-related discrimination.** Some interviewees reported that they had not observed any discriminatory practices against minority- or woman-owned firms. [e.g., WT#1, #11, #23, #31, #38, #39b, #40, #41, #42, #45a, #47, #49, #51, #53, #54, #59, #60, #61] For example:

- The female owner of a DBE-certified small business, regarding race or gender-related discrimination, commented, "It is always a pleasure doing business in California, not once have I felt discriminated against in anyway." [WT#10]
- The non-Hispanic white male owner of a specialty construction firm stated that in California he has not seen any discriminatory treatment. [#37]
- A Subcontinent Asian American male representative of a construction-related firm reported that Caltrans "...treated me with absolute impartiality, no discrimination...professional behavior and 100 percent respect...." [WT#22]
- The Black American male owner of a specialty contracting business when asked about unfavorable treatment that may have a racial or ethnic basis said, "Generally, I'm a pretty positive person. So even if something did happen, I might not have noticed it." He said, "You never know what goes on behind closed doors when you leave.... I could have bid a job and not gotten it because I'm minority, but...I would never know." [#27]

**Factors that affect opportunities for minorities and women to enter and advance in the industry.** A number of business owners and representatives discussed various factors that affect entrance and advancement in the industry for minorities and women. For example:

- Regarding any factors that affect opportunities for minorities or women to enter or advance in the industry, the Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm said, “The bottom line is, once you fall into that DBE/MBE...category...I think for the general contractors, especially for the bigger primes, it’s a real hold-your-nose moment....” He added, “...they’re going to hold their nose because [they have the attitude that they] have to have you because [the State is] making [them] use you guys.” [#10]
- The Subcontinent Asian American male owner of a DBE-certified transportation services firm stated that a lack of relationships affects opportunities for minorities and women entering and advancing in the industry. He said, “...the thing is you don’t know people.” [#54]
- The Black American male owner of a DBE-, MBE-, and CPUC-certified specialty construction firm reported that access to capital is the biggest factor that affects opportunities for minorities and women to enter and advance in the industry. [#47]
- The Subcontinent Asian American female representative of a minority woman-owned DBE-certified supply firm commented, “A lot of these larger corporations have men in power; thus, they want to work with a man that has the same power.” She added, “When they walk into a room, some of these guys don’t speak because they don’t even want to work with women in business because they don’t feel that they’re on the same level. This attitude impedes progress and advancement in the industry.” [#56]
- The Native American male owner of a DVBE-certified transportation firm commented that the most important factor affecting the ability of minorities and women to enter and advance in the industry is credit. He added that other factors depend on “what you’re doing because there are all types of limitations.” [#57]
- The Black American male owner of a DBE- and SBE-certified contracting firm said, “Minority or women businesses may not be exposed to the right opportunity. If they are exposed, they really do not have the work experience to do the work. We have one example here locally. A contractor was given a very low contract and he did not really have the on-hand experience to perform. So, he was made to be an example of why we don’t give DBE and minority contractors these kinds of jobs.” [#61]



The same business owner said, “When it comes to executing the job, whether it’s directly for the agency or as a sub, you have to have the experience. You have to have it--or you won’t make it.” [#61]

- The non-Hispanic white male representative of a general contracting firm reported that the recent trend towards more “mega projects” has an impact on opportunities for minorities and women to enter and advance in the industry. He said, “It seems like municipalities are kind of getting away from this kind of standard short paving jobs and going to the much more complex jobs...so that could be an issue for smaller companies. And that’s an issue for smaller companies regardless if they’re disadvantaged or not.” [#26]
- The Hispanic American female owner of a specialty construction firm commented that the factors that affect opportunities for minorities and women entering and advancing in the industry are individual’s “preconceived opinions about who is the better fit for our industry, meaning a male versus a female. As a woman owned company, you have to get beyond gender.” [#58]
- The non-Hispanic white female owner of a DBE-certified consulting firm commented that “figuring out where to go and figuring out how to get your foot in the door” are challenges that can prevent minorities and women from entering or advancing in her firm’s industry. [#39a]
- The non-Hispanic white male representative of a DBE-certified consulting firm remarked “...it is a male-driven industry.” [#39b]
- The non-Hispanic white female representative of a general contracting company stated that she thinks one factor that affects opportunities for minorities and women to enter and advance in the industry is access to capital. She said that a firm in her industry must be able to carry a job up to six months due to the turnaround in payments, which is particularly difficult for small minority- and woman-owned businesses because obtaining credit and financing can be harder for such firms. [#43]
- The non-Hispanic white female owner of a DBE-, SBE-, and WBE-certified specialty-contracting firm commented that there are factors that affect opportunities for minorities and women entering and advancing in the industry. She said, “It’s the kick off. It is the bonding and the money in the beginning....” [#38]
- When asked about factors that affect opportunities for minorities to enter and advance in the industry, the Black American male owner of an MBE-certified trucking firm stated, “When you come on a job, you have to act like you’ve got at least a little common sense.” He added, “To get into this field, you’re going to have to invest...if you go out and purchase some mess quality of vehicle to help you run your business...you may not get any work at all. So if you are a

minority, you really do need to count the cost before starting the business.”  
[#25]

- The non-Hispanic white male owner of an engineering firm stated that he does not believe that minorities and women have many disadvantages. He said, “I think they have all the advantages.... I don’t think anybody has excuses anymore.” [#42]
- The non-Hispanic white male owner of a specialty contracting company said, “I haven’t witnessed [any factors that affect opportunities for minorities and women to enter and advance in the industry].” He added, “The biggest thing is if you can do the job...I don’t think they care who you are.” [#51]
- The Native American male owner of a DBE-certified construction-related firm when asked if there are factors that affect opportunities for minorities and women to enter and advance in the industry said that he has observed that there are only a few women in his industry. He added, “It’s not a discriminatory factor, but how the industry is set-up.” [#49]
- When asked about factors that affect opportunities for minorities and women to enter and advance in the industry, the non-Hispanic white male representative of a general contracting company stated that difficulty with obtaining bonding is the biggest factor. [#41]
- The non-Hispanic white female owner of a DBE-certified consulting firm reported that sexism is the main factor that affected opportunities for women to enter and advance in the industry but that there is less of it today. She noted, “[Women in the industry are] so generally accepted because there’s so many of us out there now.” [#55]
- Speaking of factors that affect his firm’s ability to advance in the industry, the non-Hispanic white male representative of a DBE- and MBE-certified specialty contracting company said, “You know, you really cannot compete with the firm that has been around 50-60 years because they have the reputation, they have the manpower and they have the financial backing to do it.” [#46b]
- The non-Hispanic white male owner of a concrete inspection agency commented that a factor that could affect opportunities for minorities and women in the industry is that they have less practical experience when entering the field. He said, “Well, if they’ve gone through school that’s not a college, it’s a trade school or a school that teaches you how to pass the test... [They’re] what we’d say are book smart, they don’t use common sense.... They’re clueless because they’ve the classroom experience and not the hands-on experience.” [#59]
- The Black American male owner of a DBE- and MBE-certified construction company commented that gaining a reputation for being able to do your work

was a factor that affected opportunities for minorities and women entering and advancing in the industry. [#60]

## **H. Insights Regarding Business Assistance Programs, Changes in Contracting Processes, or Any Other 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 California 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:

- Knowledge of programs in general (*page 135*);
- Technical assistance and support services (*page 138*);
- On-the-job training programs (*page 139*);
- Mentor-protégé relationships (*page 140*);
- Joint venture relationships (*page 142*);
- Financing assistance (*page 144*);
- Bonding assistance (*page 145*);
- Assistance in obtaining business insurance (*page 146*);
- Assistance in using emerging technology (*page 146*);
- Other small business start-up assistance or assistance in general (*page 147*);
- Information on public agency contracting procedures and bidding opportunities (*page 148*);
- Online registration with a public agency as a potential bidder (*page 149*);
- Hardcopy or electronic directory of potential subcontractors (*page 150*);
- Pre-bid conferences where subcontractors can meet prime contractors (*page 151*);
- Distribution of lists of plan holders or other lists of possible prime bidders to potential subcontractors (*page 153*);
- Other agency outreach such as vendor fairs and events (*page 153*);
- Streamlining or simplification of bidding procedures (*page 156*);
- Breaking up large contracts into smaller pieces (*page 156*);
- Price or evaluation preferences for small businesses (*page 157*);
- Small business set-asides (*page 158*);
- Mandatory subcontracting minimums (*page 159*);
- Small business subcontracting goals (*page 160*);

- Formal complaint and grievance procedures (*page 162*); and
- What works well about Caltrans’s contracting processes and suggestions for improvement (*page 163*).

**Knowledge of programs in general.** Many interviewees reported having knowledge of or participating in business assistance programs and described their experiences. [e.g., #17, #22, #23, #32, #44, #52, #55, #56, #57, #58, #60, #61] For example:

- The non-Hispanic white male owner of a specialty construction firm stated that he has never been involved with any business assistance programs. He said that he is aware of the Small Business Administration and added that he went to their website and “took a look” at the SBA; but, it looked like too much work for him to take on. [#37]
- The non-Hispanic white male owner of an engineering firm stated that he has general knowledge of business assistance programs such as S.C.O.R.E. and the Small Business Administration. [#42]
- The Subcontinent Asian American female owner of a DBE- and LWBE-certified engineering firm when asked for her insights regarding business assistance programs indicated that she is aware that programs are available, “but I cannot afford to pay....” [#50]
- The Black American male owner of an MBE-certified contracting firm said, “I’ve used them, and...even some of those [small business assistance] programs you almost have to be at a point where you’re financially strong enough that you don’t need them before you can access them.” [#15]
- The non-Hispanic white male representative of a general contracting company reported that he has limited knowledge of programs in general. He noted that his knowledge is rooted in knowing a few business groups and agencies that assist with outreach to contractors and disadvantaged businesses prior to bid. [#41]
- The Black American female owner of a DBE- and SLBE-certified construction-related business stated that her firm has interacted with several business assistance programs but said there was not enough focus on specific information about how to work in the industry. She said, “It was just...surface stuff.” [#48]
- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm when asked if he had ever taken advantage of any supportive agency programs stated, “I’ve gone to a couple of those and they’re kind of set up in a manner that they’re just kind of basic...almost too remedial. Very, very basic from starting a business.... They don’t go into far enough reaching details as far as...what do you do when a prime contractor changes your bid...or what do you do when a prime contractor [stops using you because

they have reached the contract amount even though there is still work to do.”  
[#10]

- The non-Hispanic white female representative of a general contracting company stated that she was aware of the Small Business Administration (SBA). She said that she thought about exploring getting funding from the SBA when she was expanding her business into other markets, but she determined that type of funding was not necessary. She said that the SBA process is intense, but her business has the tools in place that the SBE-certification process requires. She said, “We have just been fortunate.... Some people do not have that advantage.” [#43]
- The non-Hispanic white male representative of a general contracting firm reported that his firm is “available to Caltrans and also small business” to assist with business assistance programs adding that “there’s a lot of different services even within the communities, and we’re involved in these for each of the communities where we did work.” [#26]
- The non-Hispanic white female owner of a DBE-, SBE-, and WBE-certified specialty contracting firm reported, “[I] was absolutely stunned by the number of assistance programs there are. I mean, I had no idea how many there were until I got my DBE, and the one in San Diego is exceptional.” [#38]
- The Hispanic American male representative of a DBE- and SBE-certified specialty supply firm said regarding business assistance programs, “We’re aware of them. We really haven’t taken advantage of them.” [#11]
- The Black American male owner of a DBE-, MBE-, and CPUC-certified specialty construction firm stated that he has knowledge of programs that offer assistance to small businesses. For example, he indicated that he was aware of SCORE seminars and workshops for small business development. [#47]
- When asked about business assistance programs in general, the Subcontinent Asian American male owner of a DBE-certified engineering firm mentioned his awareness of the Federal Technology Center. He commented, “I used to go [there for training classes]. I learned a lot from them.” He said, “I think like my people; we need to attend those classes and not blame others for our shortcomings.” [#12]

The same business owner reported that he recently attended a class about accounting procedures when contracting with the federal government. He stated, “I learned a lot about...Federal Acquisition Regulation clauses.” [#12]

- Regarding business assistance programs in general, the Hispanic American female owner of a MBE-certified specialty services firm said that her firm once looked into working with a networking organization, but it was not a good fit for their business. [#5]

- The non-Hispanic white female owner of an SBE-certified specialty contracting business commented, “The only [small business support program] I’m aware of is through the [Small Business Administration]. They have a great program. And I wish that that would have extended to Caltrans.” [#24]
- The non-Hispanic white male representative of a Subcontinent Asian American MBE-certified services provider stated that his firm is aware of business assistance programs and are interested in attending more classes. He said, “We are looking to figure out what we can do to make the business better.” [#21]
- The non-Hispanic white male owner of a concrete inspection agency commented that he was aware of the existence of certain programs but said, “I have no knowledge on how to attain them or how to contact the programs that are out there.” [#59]

**Other business owners reported having little or no knowledge of assistance programs in general and not participating in any programs.** [e.g., #30, #31, #40, #51, #54] For example:

- When asked about her knowledge of any business assistance programs, the non-Hispanic white female owner of an SBE-certified specialty consulting company said, “I don’t have time to go to some kind of meeting and I guess I don’t see myself as needing help, so I don’t respond to any of those things.” [#20]
- When asked if he was aware of any business assistance programs, the non-Hispanic white male representative of a DBE-certified construction-related firm responded, “Today, no. I am not aware of anything. There may be some, but I know that a few years ago, there were some small business loans like 2 percent for out of the country people. People coming in from other countries to start a business.” [#53]
- The non-Hispanic white female owner of a DBE-certified consulting firm said that she is aware of business assistance programs; however, she added that she has not used them because her firm is service driven. [#39a]
- The non-Hispanic white male owner of an SBE-, DVBE-, and SDVOSB-certified consulting firm stated, “I’m sure there are some, but I am pretty independent — I don’t even recognize there are some. From my perspective, I do not think they are useful, but that is just my perspective. I am sure they could help somebody.” [#45a]
- The Native American male owner of a DBE-certified construction-related firm said that he has not taken advantage of any business assistance programs, “I haven’t used them.” [#49]

**Technical assistance and support services.** The study team discussed different types of technical assistance and other business support programs. Some interviewees reported experience with or knowledge of technical assistance and support services. For example:

- The non-Hispanic white male owner of a specialty construction firm stated that he had heard of a company that would help with technical support and with understanding “how to jump into a system like Caltrans” but could not recall the company’s name. He went on to say that Caltrans has its own culture “even down to how you measure things and do their plans,” so this company provides support to make that transition and help businesses learn the system. He said that type of assistance would be helpful. [#37]
- Regarding business assistance programs offered by trade or professional organizations, the non-Hispanic white male owner of a SBE- and DVBE-certified specialty construction firm stated, “I don’t know what they do, but they sure as hell don’t help anybody.” He said that his firm had never received any assistance from trade or professional organizations. [#8]
- The Black American male owner of a specialty contracting business reported being unaware of any technical assistance or support services. [#27]

**Many business owners reported that technical assistance programs would be helpful.** [e.g., #38, #39a, #45a, #46a, #47, #49, #51, #52, #53, #55, #58, #59] For example:

- The non-Hispanic white female owner of an SBE-certified specialty contracting business reported that technical assistance programs are “not related to construction at all...I’m selling a service. But what they’re trying to teach me didn’t really apply to what I need in construction.” [#24]
- The Black American male owner of a DBE- and MBE-certified construction company stated that technical assistance and support services are great if the timing is right. [#60]

**Some business owners do not find technical assistance programs useful, or are unaware of the program.** [e.g., #16, #25, #42] For example:

- The Black American male owner of a DBE- and SBE-certified contracting firm reported that technical assistance and support services are not beneficial; particularly, with the amount of time that is required to receive the assistance of services, it does not get a firm any work. [#61]
- The non-Hispanic white female representative of a general contracting company said that technical assistance and support services are “not that big of a deal anymore...like it was 20 years ago.” [#43]

**On-the-job training programs.** Some interviewees felt that on-the-job training programs would be useful or already participated in the program. [e.g., #37, #38, #39a, #47, #50, #51, #52, #53, #55, #58, #60] For example:

- Regarding on-the-job training programs, the Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm reported, “The problem we run into is we’re on the union and all our employees are...supposedly getting trained from their prospective unions, which isn’t necessarily the case.” [#10]
- Regarding on-the-job training, the Black American female owner of a construction-related business reported that she takes advantage of all Caltrans online training. She said, “I know I sound like a “Caltrans commercial. They are very good. I have taken training courses with them on-line.” [#2]
- The non-Hispanic white male owner of an SBE-, DVBE-, and SDVOSB-certified consulting firm stated that on-the-job-training programs are useful. He said, “My first employee was involved with the program. They would pay half of her salary if I hired her, and give her some training. That worked perfectly.” [#45a]
- The Hispanic American male owner of a DBE- and MBE-certified specialty contracting company reported that on-the-job training programs are “very important” to his firm. He added, “The more [trained workers] we have, the more work we can get.” [#46a]

**Many other interviewees said that on-the-job programs would not be helpful in their industry, that barriers exist, or that they are unaware of the existence of such programs.** [e.g., #12, #24, #28, #33, #40, #42, #54, #56] For example:

- The non-Hispanic white male representative of a general contracting company said, “I had my own on the job training programs.” [#41]
- The Native American male owner of a DBE-certified construction-related firm noted that in his industry on-the-job training programs would typically not work because a certification is required to perform the work. [#49]
- The Black American male owner of a DBE- and SBE-certified contracting firm noted that he does not see value in on-the-job training programs. He stated, “You have to be licensed to be a contractor.” [#61]
- The non-Hispanic white male owner of a concrete inspection agency noted that he has mixed opinions about job training programs as they are extremely expensive. He stated, “I personally don’t pay that. Now, for an employee that is being rehabilitated through an agency that would do because I would probably have to pay them because they have a way to be supported during the training process.” [#59]



**Mentor-protégé relationships.** Many interviewees commented on mentor-protégé programs. A number of business owners said that mentor-protégé relationships would be desirable. [e.g., #35, #37, #38, #39a, #40, #43, #46a, #47, #49 #52, #53, #55, #56, #57, #58, #60, #61] For example:

- The Hispanic American male representative of a DBE- and SBE-certified woman-owned engineering firm indicated that his firm had participated in the mentor-protégé program. He said, “We are kind of in touch because I still go and attend [mentor-protégé meetings] on a quarterly basis.” [#23]
- The Subcontinent Asian American male owner of a MBE-certified professional services firm reported, “The mentor program that Caltrans has is very good in concept, but they need to carry forward a step further.” He said, “They make sure that the mentor and the protégé have meetings and discuss the problem, the solutions. The mentor, the protégé, step-by-step to marketing, to the FAR compliance issue, marketing, finance, everything...very effective, and they should do it statewide.” [#14]
- The non-Hispanic white male owner of an SBE-certified specialty consulting company said that he has participated in mentoring, and he currently has a student from Fresno State working for the company that worked with them last summer. [#29]
- The non-Hispanic white male representative of a general contracting firm stated that his firm participates in mentor-protégé relationships and currently has one protégé. [#26]
- Regarding the importance of mentor-protégé programs, the Black American female owner of a DBE- and SLBE-certified construction-related business commented, “Yes. That’s what [is] really going to help small businesses.” [#48]
- The non-Hispanic white male representative of an engineering firm reported, “We work with California State University Fresno in helping with the students.” [#33]
- The Black American male owner of a specialty contracting business stated that although he is unaware of mentor-protégé programs, he thinks mentors are important. He commented, “Throughout my career I’ve found a handful of people that I would consider mentors and I...go to them when I have questions on things.” [#27]
- The non-Hispanic white male representative of a general contracting company indicated that he knows about mentor-protégé relationships but has not participated in them. He added, “I think [mentor-protégé relationships are] a great idea for [small businesses] to grow and have a resource to draw on that’s outside of their knowledge base.” [#41]

- The non-Hispanic white female owner of an SBE-certified specialty contracting business reported that her firm has not been involved in any mentor-protégé relationships but would like to be included in one. [#24]
- The non-Hispanic white male owner of an SBE-certified consulting company stated that his firm is active in the Calmentor program with Caltrans. [#44]
- The non-Hispanic white male owner of a concrete inspection agency commented that mentor-protégé relationships are resourceful because that is how he got started. [#59]

**Some owners had negative perceptions, faced barriers to participation, felt such programs are not useful, or were unaware of mentor-protégé programs.** [e.g., #16, #20, #25, #28, #42, #45a, #50, #51]. For example:

- The Hispanic American male representative of an engineering-related firm commented, "...a mentor-protégé program is a good idea, but it depends on how it is implemented.... In District 7...it ended up serving on a few firm; there was evidence of favoritism...." [WT#24]
- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm when asked about mentor-protégé relationships stated, "That's something that I've honestly been trying to have happen for a while and can't really find anybody interested in doing that. It is a great concept, but [the big companies] do not want to do it. [The big companies'] perspective is, why [they] should train [us] to take [their] business from [them].... Seriously, how can we possibly affect your businesses in a negative manner?" [#10]
- The Subcontinent Asian American male owner of a DBE-certified engineering firm indicated that he had tried to participate in the Caltrans mentor-protégé program for two years. He said, "I [spent] many days on it;...daily, weekly, one [or] two hours...so that I can fit in with the mentor protégé program with...Caltrans.... I was so disappointed. [I attended many meetings] with...the district, but [ultimately they] could not help me" get involved in a mentor-protégé relationship. [#12]
- The non-Hispanic white female owner of a WBE-, SBE and DBE-certified specialty construction firm said that she has tried to participate in the mentor-protégé program, but the program was full. [#22]

**Joint venture relationships.** Interviewees also discussed joint venture relationships. Many business owners are interested in, support, or already participate in joint ventures. [e.g., #12, #16, #17, #29, #37, #39a, #40, #41, #43, #44, #46a, #49, #50, #51, #52, #53, #54, #55, #56, #60, #61] For example:

- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm when asked about joint venture relationships said, “I’ve looked at them. I’ve only found one company that was at least willing to try to put something together.... No one else would want to be bothered with it because it was going to take too much to manage.” [#10]
- The Black American female representative of a trade organization reported, “...one of the issues we see from a lot of the African American contractors is that they don’t have the capacity....” She added, “...we try to develop joint ventures...[and] partner the construction teams.... There isn’t much coordination in how to keep them together...[and] manage them, because they’re all trying to manage their things.” [PF#3]

The same representative of a trade organization added, “...from an organization like Caltrans, how do we help...joint ventures that we are trying to help minority contractors develop so that they can have the capacity to go for those subcontracts or the prime contracts that are available...how do we help manage that relationship.” She added, “We always face the barrier of how to maintain the relationship of the contractors that are joining in the joint ventures.” [PF#3]

When asked if her trade organization has had more success with other public agencies, she responded, “Honestly, not so much.... It’s just a lack...in general ....” [PF#3]

- The Hispanic American male representative of a DBE- and SBE-certified specialty supply firm said that joint venture relationships are “more for the general contractors. Because with [our particular business]...we have to do the work, so it’s hard to joint venture, especially if it’s not another DBE firm.” [#11]
- The Black American male owner of a DBE-, MBE-, and CPUC-certified specialty construction firm said his company has not participated in any joint venture relationships; but, from his perspective, these relationships are beneficial. He added that he might pursue a joint-venture relationship as larger projects become available. [#47]
- The Hispanic American male owner of a specialty construction firm reported that his firm did a joint marketing program and website development with another company. [#4]

- The Subcontinent Asian American male owner of an architecture and design firm said that they once went into a joint venture to bid on a project with City of Thousand Oaks. He added that they were on a short list [final 4] to win the bid. [#6]
- The non-Hispanic white male representative of a general contracting firm noted that his firm does “a huge amount of [work] in joint venture.” [#26]
- When asked about joint venture relationships, the non-Hispanic white male owner of an engineering firm stated, “...I was kind of late to that bar. I wish I would have started that some time ago....” [#42]
- The non-Hispanic white male owner of a concrete inspection agency said that he was in favor of joint venture relationships. He said, “There are certain jobs out there that are really huge and...that I could not, or wouldn’t even think about doing without maybe a joint venture.” [#59]

**Some faced challenges with the joint venture relationships, have not participated, or find no value in joint relationships.** [e.g., #9, #22, #23, #28, #32, #34, #48] For example:

- The non-Hispanic white male owner of an SBE-certified specialty contracting business stated that he has stopped pursuing joint venture relationships. He said, “Everybody wants to try to take advantage of you. That’s what I’ve experienced with joint ventures.” He said potential partners “either want to ride off my reputation or my skills because they don’t have them or they don’t have the license.” [#35]
- The non-Hispanic white male owner of an SBE-, DVBE-, and SDVOSB-certified consulting firm said he does not agree with joint venture relationships. He further said, “I never do joint ventures. I don’t have partners, only my wife.” [#45a]
- The non-Hispanic white female owner of a DBE-, SBE-, and WBE-certified specialty contracting firm explained that joint ventures do not work well for DBE subcontractors “because the first thing that happens is okay, if I carry a subcontractor under my name, [prime contractors] get a 100 percent of the contract value for the DBE quota. If I’m the joint venture, [the prime contractors] only get the percentage that I represent in the joint venture.” [#38]

**Financing assistance.** The study team asked business owners and managers about financing assistance.

**Many interviewees thought financing assistance is valuable, have used it, or already face challenges with financing.** [e.g., #2, #12, #18, #34, #39a, #40, #42, #43, #44, #46a, #49, #51, #53, #54, #55, #56, #57, #58] For example:

- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm stated, “I’ve looked at SBA and the loans. We can never qualify because they’re just too difficult to get.” [#10]
- The Black American male owner of a DBE- and SBE-certified contracting firm described a business assistance program that he supports, “...selling accounts receivable to a third party, so that your firm is paid immediately and the third party collects debts from the client] would be good if it was reasonable. The fees are very high. That’s your money that you’re banking against.” [#61]
- The Black American male owner of a DBE- and SBE-certified construction-related firm when asked about financing assistance programs stated that he is aware of the Small Business Administration financing assistance program but that the “program doesn’t allow you to buy or to finance equipment.... They only allow you to finance a job.” He added that there should be “a program to help you finance equipment based on the contract that you have.... That would help out a lot.” [#19]
- The non-Hispanic white male representative of a general contracting company stated that his firm has provided financial assistance to both disadvantaged and non-disadvantaged subcontractors. He added, “Down through the years, many times we’ve had subcontractors say ‘we are really struggling to make payroll. We have [several jobs we are working on]. Is there any way that you prepay us?’” He said that, if his firm had cash on hand, he would grant the subcontractors request. [#41]
- The non-Hispanic white male owner of a concrete inspection agency stated that he thought financing assistance would be a good program. He said that he sometimes does not accept certain jobs because he knows the time period for getting paid. He said, “...if I had two or three employees that are maybe working on it a day and I know that I’m not going to get paid for two months, without some kind of financing, I could not bid on that job.” [#59]
- The Black American male owner of a DBE- and MBE-certified construction company noted that financing assistance would be a good program. He said, “I would definitely love it.” [#60]

**Many business owners did not need financing assistance, are against a program, faced challenges with a program, or are unaware of any financing assistance program.** [e.g., #5, #9, #13, #17, #23, #24, #27, #32, #35] For example:

- The non-Hispanic white male owner of a specialty construction firm stated that seeking financial assistance makes him “a little afraid,” whether he should be or not, because it seems so far out of his reach. He went on to say that “it probably isn’t.... They’re just as willing to help me if I would just work with and call them and enlist their assistance.” [#37]
- The non-Hispanic white female owner of a WBE-, SBE-, and DBE-certified specialty construction firm reported that she attended a training class on financing assistance where the instructor recommended businesses have their books audited at the cost of \$5,000. She said, “There are some things that are interesting and you learn, and then other things that are just [unrealistic]. The amount of time I’d have to spend to do it and then the amount of money it would cost [is not reasonable].” [#22]
- The Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm stated that her firm’s experience in working with other individuals and organizations offering financing assistance is that they cannot help do any more than the firm could do themselves with financing a project. [#3]
- The non-Hispanic white male owner of an SBE-, DVBE-, and SDVOSB-certified consulting firm when asked about financial assistance said, “[Financial assistance] may help us, but financial assistance especially on the federal level can really backfire, and they bite badly. There is a bad side to financial assistance.” [#45a]
- The non-Hispanic white male owner of an SBE-certified specialty consulting company stated that his firm has never sought help obtaining financing, but noted that he has “thought about getting” a Small Business Administration loan. [#29]

**Bonding assistance.** The study team asked business owners and managers about bonding assistance. Many companies do not face challenges with bonding requirements or need assistance, and many are unaware of the program. [e.g., #10, #23, #24, #27, #29, #35, #48]

- The Black American male representative of a general contracting firm reported that they assist DBEs with bonding assistance by identifying “where [DBEs] can get bonding or we can sometimes waive bonds or cover in other ways without paying their bond. We help to find bonds. If they can’t get it, we’ll waive it.” [#26a]

**Some interviewees thought bonding assistance would be valuable or are using it already.** One supported small business bonding classes but suggested that they focus more on small business needs. [e.g., #16, #39a, #40, #43, #47, #44, #45a, #46a, #49, #51, #52, #53, #54, #55, #56, #57, #58, #59, #60, #61] For example:

- The non-Hispanic white female owner of a WBE-, SBE-, and DBE-certified specialty construction firm reported that she attended a bonding training class. She said it was helpful, but the class focused on businesses that have a profit of \$15 million. At \$15 million, “you don’t even need help because that’s...a piece of cake for you.” [#22]

**Assistance in obtaining business insurance.** Some business owners and managers interviewed said that assistance obtaining business insurance would be helpful to small business. [e.g., #37, #39a, #40, #42, #44, #47, #48, #49, #55, #56, #58, #59, #60]

**Some interviewees said that they would appreciate help regarding business insurance.** For example:

- The non-Hispanic white female owner of a WBE-certified specialty construction firm reported that her firm faced challenges in obtaining insurance for working over water, and thus were unable to bid on work in the Port District. [#7]
- The non-Hispanic white male owner of an SBE-, DVBE-, and SDVOSB-certified consulting firm stated that assistance in obtaining business insurance would be helpful because premiums are so expensive. [#45a]

**Other business owners did not require assistance in obtaining business insurance or did not support an assistance program.** [e.g., #10, #29, #46a, #53, #61]

- The non-Hispanic white female representative of a general contracting company said that assistance in obtaining business insurance is unnecessary because reputable brokers and companies already exist to assist businesses. [#43]

**Assistance in using emerging technology.** Many business owners said that assistance using emerging technology would be helpful. [e.g., #37, #39a, #41, #42, #44, #45a, #46a, #47, #48, #49, #52, #54, #55, #56, #57, #58, #59, #60, #61] For example:

- Regarding assistance with emerging technology, the Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm said, “[There is] a lot of emerging technology with shotcrete....” He added, “...but [the big companies] will not even let you come to the same trough that they’re at to pick up the drool as it goes over the edge, they won’t do it.” [#10]
- The non-Hispanic white male owner of a specialty contracting company said, “I think that [assistance using emerging technology] would be really good,

especially with Caltrans because they have all the technology.... All their measurements are in metrics, so it would be good to get some tutoring or assistance on that.” [#51]

**Some business owners indicated that assistance using emerging technology is not necessary or are unsure of the value or such assistance.** [e.g., #40, #50]

- The non-Hispanic white female representative of a general contracting company said that new programs providing assistance in using emerging technology is not necessary because there are a number of different programs already in place for technology assistance. [#43]
- The non-Hispanic white male representative of a DBE-certified construction-related firm commented about assistance in using emerging technology, saying, “Again, it’s kind of a nice gesture in a way to help people, but where is the fairness? If you are going to put some new technology out there, why just focus assistance of any form on the small business? Why not help larger businesses as well? The larger businesses look at some of that as the cost of doing business. I consider us, we do have [over 200] people and I consider us being a small business. And with that being said, I think we take advantage of all the technology.” [#53]

**Other small business start-up assistance or assistance in general.** Some interviewees mentioned other types of business assistance and offered their opinions. For example:

- The non-Hispanic white male owner of a specialty construction firm stated that he has heard of other loan companies through advertisements on AM radio but has no personal experience with such loan companies. [#37]
- The same business owner reported that when credit reporting is required past financial mistakes could limit a company’s growth or success. [#37]
- The non-Hispanic white female owner of a DBE-certified consulting firm reported that if she was starting up again “...it would be very helpful to have a place that has meeting rooms that had color printers that I could access at any time that I needed to.” [#55]
  - The Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm recounted that in the early 2010’s she wanted to take the company to next level. She said that she applied for a scholarship with a private-sector business development program to learn how to develop a business plan. Her goal was to rely less on others and have greater peace of mind. She remarked that the program taught her how to find resources with the right type of experience to assist her in growing the business. In addition, she reported that the education she received provided a roadmap for her to grow her firm. [#3]



- The Black American male representative of a general contracting firm reported that his company has its own “very expensive small disadvantaged business program.” He said, “[We] make sure that we meet the goals and that we help DBEs [and] small disadvantaged businesses, in their ability to do work and expand their capability.” [#26a]
- The Hispanic American male owner of a specialty contracting company when asked if there is any other small business start-up assistance that would be helpful stated that if a business needs start-up assistance “you are already in trouble.” He added that a firm must “learn from experience and mistakes.... Too much help does not enable businesses to learn what is needed and necessary.” [#40]
- The non-Hispanic white male representative of a DBE-certified construction-related firm stated that start-up assistance would be helpful to the industry. He explained, “It’s too easy to start a business. People go out on their own and have a good business model...[but] they really do not know what they are doing....” [#53]
- The Black American male owner of an MBE-certified contracting firm spoke about his affiliation with a trade association. He reported that the trade association works with a number of different groups to bring resources to contractors saying, “We collaborate with the SBCDCs, we collaborate with SBA, we collaborate with the mid-state developments....” [#15]
- The female owner of a WBE-certified transportation firm said they take advantage of opportunities for safety training through the DOT and send their employees for safety certification to a program called Safety Services. [#34]
- The non-Hispanic white male owner of an SBE-certified consulting company said that when he started his business, he referred to a business coach. He also said that shortly thereafter he discovered the services of the small business development centers. He reported that this assistance has been helpful. [#44]
- The non-Hispanic white male owner of an SBE-, DVBE-, and SDVOSB-certified consulting firm said, “I don’t know how effective those small business start-up assistance programs are. They are more hand holding than anything else. I really didn’t think it is helpful for me but that’s my personality.” [#45a]

### **Information on public agency contracting procedures and bidding opportunities.**

Many interviewees indicated that more information on public agency contracting procedures and bidding opportunities would be helpful. [e.g., #38, #39a, #40, #41, #42, #45a, #46a, #47, #49, #51, #56, #57, #58, #59, #60, #61] For example:

- The non-Hispanic white male owner of a specialty construction firm stated he is not very familiar with public agency contracting procedures and bidding

opportunities, other than that some cities utilize the “Green Sheet” to list projects and that some cities list projects on the city’s website. He reported that as a small business he would “love” to bid on public agency work, but it seems out of his reach because of bonding—a barrier that he said “may all be in my head.” He went on to say that “work is work.... It’s just getting through the red tape...it all seems so daunting.” He added that he thinks getting information on public agency contracting procedures and bidding opportunities would be helpful. [#37]

- The non-Hispanic white male owner of an SBE-certified specialty consulting company stated that public agencies “should make [opportunities and bidding information] freely accessible.... [There should be an agency run] site we can go to...and see what jobs are bidding in our region that we want to bid on...and not [have] to go through...a third party entity [or pay for BidSync].” [#17]
- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm reported that he doesn’t “really have any knowledge of the contract by the time it gets down to us because I’m working for [a large prime contractor] as a third-tier sub and you’re basically...in that same category of the guys that bring the chemical toilets....” [#10]
- The non-Hispanic white female owner of a DBE-certified consulting firm reported that information on public agency contracting procedures and bidding opportunities are fine but suggested that public agencies rethink including indemnification clauses in their contracts. She said, “It’s not an education issue for the people starting up a business. It’s an education thing for the people in the public agencies insisting upon having a particular thing in their contract.” [#55]
- The non-Hispanic white male owner of an SBE-certified consulting company said that information on public agency contracting procedures and bidding opportunities would be helpful. He added that there are so many different little agencies that visiting them all looking for opportunities is labor intensive for small businesses. He noted that to have a “one-stop” place to review the available bid opportunities for public agencies would be helpful. [#44]

**Some business owners reported that state agencies already do a good job providing information about bid opportunities.** [e.g., #53]

**Online 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. [e.g., #39a, #40, #41, #42, #43, #44, #45a, #46a, #47, #48, #49, #51, #53, #54, #56, #57, #58, #59, #60, #61] For example:

- The non-Hispanic white male owner of a specialty construction firm said that he thinks on-line registration with a public agency as a potential bidder is how

the study team got in contact with him because he was looking into doing Caltrans work at one time. [#37]

- The non-Hispanic white female owner of a DBE-certified consulting firm reported that online registration is okay but must improve. She added, “Sometimes, you want to look into something without everybody knowing you’re looking into it. Often, when you do that, you can just take a quick look at the project description and go, ‘Oh, no, that won’t work.’ But if you have to register and go through that whole process beforehand, frankly if I start seeing that, I usually just [say], ‘No, I’m not going to go through it.’” [#55]
- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm reported, “We use it a lot.... It’s just, it’s time consuming.... And you just have to sit there and go through all the specs.... I have not used it in a while because the bottom line is, I do not know if anyone, any of the primes, look at it. They all pick up your name and number from the [DBE database]...and they do not even do it themselves; they have companies that do it all now. [There’s one] company that always has the same British lady with the same British accent call all the time.... She called while we were sitting here.” [#10]

**Hardcopy or electronic directory of potential subcontractors.** Most interviewees said that hardcopy or electronic lists of potential subcontractors would be helpful. [e.g., #37, #39a, #40, #43, #44, #45a, #46a, #47, #48, #49, #50, #54, #55, #56, #57, #58, #59, #60, #61] For example:

- The non-Hispanic white male owner of a specialty construction firm stated that a directory of potential subcontractors would be helpful as long as the firms were vetted and legitimate. He believes that currently anyone can go online and create a profile but thinks that changing this so that registered firms complete an investigation to be sure they are legitimate would be a good thing. [#37]
- The non-Hispanic white male owner of a specialty contracting company said that hardcopy or electronic directories of potential subcontractors would be good for networking with bidders. [#51]
- The non-Hispanic white male representative of a general contracting company reported that his firm has been in discussions with Caltrans about keeping their DBE directory up to date. He said, “If they are going to make us responsible to meet certain goals, we don’t want to get rejected because we named somebody out of their database that isn’t current, and that has happened.” [#41]

**One interviewee reported that hardcopy is obsolete.**

- The non-Hispanic white male representative of a DBE-certified construction-related firm reported, “For many years, I’ve had many of those. I do not even look at them because of the electronic versions of things today. Electronic version might help but the hardcopy [would not] — this is the new millennium.” [#53]

**Pre-bid conferences where subcontractors can meet prime contractors.** Many business owners and managers supported holding pre-bid conferences. [e.g., #11, #13, #16, #17, #22, #37, #39a, #40, #41, #42, #47, #48, #49, #51, #52, #59] For example:

- The Hispanic American male representative of a DBE- and SBE-certified woman-owned engineering firm indicated that his firm attends pre-bid meetings to “network and talk to people.” [#23]
- When asked if she has attended pre-bid conferences, the owner of a WBE-certified transportation firm replied that she has and said that they have been “very positive experiences.” [#34]
- The non-Hispanic white male owner of an architecture-related consulting firm reported that he attends pre-bid conferences. He said, “Oftentimes if there are requirements for [Local Business Enterprise] you can get a percentage [for instance], 10 percent if you simply go to the [pre-bid conference].” [#30]

**Some interviewees indicated that pre-bid conferences are not helpful, they are not available, or that they do not attend them for other reasons.** [e.g., #5, #24, #29, #32, #46a, #61] For example:

- The Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm stated that opportunities for subcontractors to meet and interact with prime contractors during pre-bid conferences are not available. [#3]
- The Subcontinent Asian American male owner of a MBE-certified professional services firm reported that he attends pre-bid conferences, but they are often not helpful. He stated, “I go to the preconstruction meeting, pre-proposal meeting for the IP and try to network and mingle with those people there.” He added, “But what happened is, I found out that, in many cases, the primes have the teams set up long before the bid day of the proposal. So, if I go to the pre-proposal, it is too late.” [#14]
- The Subcontinent Asian American male owner of a DBE-certified transportation services firm commented that attending pre-bid conferences has no benefit. He said, “The problem is that sometimes it’s very far away to go....” [#54]

- The non-Hispanic white male owner of a SBE- and DVBE-certified specialty construction firm gave an example of a pre-bid meeting on a Caltrans project that he described as a “simple little job.” He stated that there were fourteen people from Caltrans in the room to speak with him about the job. “I thought, oh, my God, what are these people doing here?.... I’ve got this little \$25,000 job...and so they started grilling me about what I was going to do and this and that and I finally said, what are you guys doing here? You’ve got fourteen of you in here; I’m in here by myself.” [#8]

He added that he thought the number of participants [in the pre-bid meeting] overcomplicated the process for a small project. [#8]

- The non-Hispanic white female owner of a WBE-certified specialty construction firm reported that they do not need to attend pre-bid conferences as they know most of the prime contractors. [#7]
- The Black American male owner of an MBE-certified trucking firm reported that he is much more likely to attend pre-bid meetings if he has been personally invited to attend saying “unless they call me directly I may not attend because...I feel like they’re going to look at me and say, ‘he’s not going to work [out],’ without really knowing me.” [#25]
- The non-Hispanic white female representative of a general contracting company stated that pre-bid conferences where subcontractors can meet prime contractors are good, “only at the invitation of the prime.” [#43]
- The non-Hispanic white male owner of an SBE-certified consulting company stated that he has attended several pre-bid meetings adding, “You think you are there to pursue good teaming opportunities...but during the 20-minute networking window you quickly find out that the teams are already together.” [#44]
- The non-Hispanic white male owner of an SBE-, DVBE-, and SDVOSB-certified consulting firm said that pre-bid conferences where subcontractors can meet prime contractors “are useless.” [#45a]
- The Black American male owner of a DBE- and MBE-certified construction company said that pre-bid conferences where subcontractors can meet prime contractors were not helpful to attend and that they were a waste of his time. [#60]

**Distribution of lists of plan holders or other lists of possible prime bidders to potential subcontractors.** Most of the business owners and managers interviewed supported the distribution of plan holders lists. [e.g., #37, #39a, #40, #41, #42, #43, #44, #46a, #47, #48, #49, #50, #51, #52, #53, #56, #57, #58, #59, #60, #61] Examples of comments include:

- The non-Hispanic white male owner of an SBE-, DVBE-, and SDVOSB-certified consulting firm supports distribution of plan holders lists since he reported that they are very important for networking. [#45a]
- The Subcontinent Asian American male owner of a DBE-certified transportation services firm commented, “Yeah, any information of the contractors, primes or general contractors—if they have the names....” [#54]

**Other agency outreach such as vendor fairs and events.** The study team asked interviewees to speak about their knowledge and experience of agency outreach such as vendor fairs and events.

**A number of business owners indicated that they faced challenges in attending outreach events, do not support their usefulness, or are unaware of their existence.** Some business owners and managers reported that they could not attend outreach events for many reasons including time constraints, limited staff size, and location. [e.g., #7, #10, #17, #19, #42] For example:

- The Black American male owner of a DBE- and SBE-certified contracting firm reported that he does not believe in outreach such as vendor fairs and events. He commented that such events “...steal so much of your time that you would lose focus on what you’re really trying to do. What you’re really trying to do is get in a room with that agency and sign a contract.” [#61]
- A female owner of a DBE- and WBE-certified construction firm commented, “I’d like to say that I don’t think that the lack of attendance to these kind of things is any indication that there’s not a desire or a need for the program. I find that as a business owner, you’re either buried with work and...working really hard to get new contracts, looking at ways of increasing your business, and/or ways of doing it better.” [PF#16]

The same business owner added, “And so the last thing you have time to do is to go to...meetings.... So you either don’t have time to attend, or you don’t know about the program or the...opportunities available in the program.” [PF#16]

- Regarding the disparity study public meetings, the president of a DBE-, SBE- and MBE-certified engineering and construction firm commented, “Who schedules meetings between 3:30 and 5:30PM! The height of the commuting hour.” [WT#11]

- The Black American female owner of a DBE- and SLBE-certified construction-related business stated, “For me, if they have food, it’s just, ‘hey, how are you doing?’ social thing and go eat and leave.” [#48]
- The Hispanic American business representative, regarding the disparity study public meetings, remarked, “...it appears that Caltrans is not really after attendance at these meetings when they schedule a meeting in downtown Los Angeles from 3:30 to 5:30.... [That was] obviously scheduled by someone who has no idea about traffic...or by someone who doesn’t care!” [WT#3]
- The Hispanic American male owner of a specialty contracting company stated that he has attended outreach events but said these events did not work for him because “[the meetings were] not what I was looking for.” He attended the meetings to network but stated that he gets more business through referral and repeat business. [#40]
- The Hispanic American female owner of a WBE-, SBE-, and MBE-certified general contracting firm reported, “I belong to the [Association of General Contractors], so we get a lot of training through there.... They always invite me for different things that are going on for certifications for CPR or just for my guys...OSHA....” [#13]

**Many interviewees supported agency outreach such as networking events and vendor fairs and attend them.** [e.g., #4, #5, #32, #34, #41, #43, #44, #45a, #46a, #47, #49, #51, #52, #53, #54, #55, #56, #58, #59] For example:

- The minority owner of a DBE-certified project management-consulting firm, regarding outreach events said, “...once you get the certifications, you don’t know how to proceed to get your first contract with all these agencies.... You go to these match-making sessions and they’re great.” He added, “...once you come off from the...session and you try to follow-up with all the contacts...you hit road blocks.” [PF#7]
- The Hispanic American male representative of a DBE- and SBE-certified specialty supply firm stated, “We’ll go to those because...sometimes we feel that’s a step in the door to get work. [We will] are notified about projects. It all depends on how many of those projects are relevant to the work [we] do.... Many times with good faith they do not really look at the work codes, and we are being bombarded with stuff that is not relevant to us. So sometimes it’s nice to...know about the projects, but sometimes there’s nothing in there for us...[and] none of the bid items relate to the work we do.” [#11]
- The Hispanic American female owner of a WBE-, SBE-, and MBE-certified general contracting firm reported, “In the beginning...going to...PTAC, which is part of the City of San Diego.” She added that they guide you how to “get your...certifications or to work with Caltrans, they tell you the process, what you have to do, how to qualify.” [#13]

- The non-Hispanic white male owner of a specialty construction firm stated that he feels agency outreach events are like big “schmooze fests,” but he thinks they are great networking opportunities. [#37]
- The non-Hispanic white male representative of a DBE-certified consulting firm reported that he supports outreach such as vendor fairs and events. He commented, “We try to attend those events, but haven’t for a few years now...but I always try to send somebody. These are very advantageous. Honestly, we got one of our biggest clients because of the L.A. vendor fair.” [#39b]
- The Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm reported that she is involved with the Southern California Contractors Association and stressed the importance of affiliating with industry-related professional organizations that help provide business liaisons, partners and contacts. She reported that she met an individual who helped her to work effectively with certain unions through one of these organizations. [#3]

The same business owner added that she realizes that small businesses and women do not have a voice in public works construction and that she needed to make reliable contacts for guidance. [#3]

- The Hispanic American male owner of a specialty contracting business stated that his firm participates in workshops and events put on by several trade associations. He said, “We do AGC [the Association of General Contractors], some AGC networking...the ABC, Associated Builders and Contractors as well.” He said these associations help keep his company current on regulatory changes, such as OSHA, and help with compliance. [#9]
- The Black American male owner of a DBE- and MBE-certified construction company said that he does believe in outreach such as vendor fairs and events. He commented that such events have resulted in work for his firm. [#60]

**Several business owners and managers indicated that outreach events were not useful for their companies or said that they do not attend them.** [e.g., WT#14, #19, #57]

- The Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm said that these events are not good for facilitating new relationships. She commented that her firm always sees the same people. She also reported that the State is not looking for firms like hers that are already participating. They are looking for new entrants and participants. [#3]

The same business owner said that her firm learns more from professional organizations than from Caltrans and that Caltrans’ outreach is “flimsy.” [#3]



**Streamlining or simplification of bidding procedures.** Most interviewees indicated that streamlining or simplification of bidding procedures would be helpful. [e.g., #20, #29, #37, #39a, #40, #42, #44, #46a, #47, #48, #49, #50, #51, #52, #53, #54, #55, #56, #57, #58, #59, #60, #61] For example:

- The non-Hispanic white male representative of a general contracting company when asked if streamlining or simplification of bidding procedures would be beneficial said, “It would definitely help.” [#41]
- The non-Hispanic white female representative of a general contracting company said that streamlining or simplification of bidding procedures would be helpful. She remarked, “I’m sure Caltrans has their standardized formatting.... Uniformity would be wonderful.” [#43]

**Some business owners indicated that streamlining of bidding is unnecessary.** [e.g., #9, #45a]

- The non-Hispanic white female owner of a WBE-certified specialty construction firm when asked if simplifying bidding procedures would be helpful to her firm responded that it “...seems to be working for me.” [#7]

**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.** [e.g., PF#4, #7, #9, #10, #13, #14, #16, #17, #22, #28, #37, #29, #39a, #40, #42, #44, #45a, #47, #48, #49, #50, #51, #52, #53, #54, #55, #56, #57, #58, #59, #60, #61] For example:

- The Hispanic American male representative of a DBE- and SBE-certified specialty supply firm indicated, “It would be nice if they would break out some of the bid items...on larger projects where they’ve lumped out all of the [materials we supply]. There [are] different phases of the work that seems like they could break it down to where...a DBE business would have a chance. Especially on these...larger projects...to level out the playing field it’d be nice if they could break it down.” [#11]
- The non-Hispanic white female representative of a general contracting company said that breaking up large contracts into smaller pieces would be helpful. She noted, however, that contracts should only be unbundled if a dollar threshold limit was established. [#43]

**A few business owners saw both positive and negative aspects of unbundling contracts.** For example:

- The non-Hispanic white male representative of a general contracting company said that breaking up large contracts into smaller pieces would be helpful for small businesses. He added, “We don’t have a problem with

[unbundling] because some of these projects are getting just huge, they're getting bigger and bigger...but you can't [break projects] down to such a small level that you lose continuity on the overall project." [#41]

**A few business owners did not believe unbundling contracts would be helpful.** For example:

- The Hispanic American female owner of a MBE-certified specialty services firm said that breaking contracts into smaller pieces would not benefit her firm. "[Our field] is already a small portion of the overall contract and is a type of service that is already broken out in the overall contract." [#5]
- The Hispanic American male owner of a DBE- and MBE-certified specialty contracting company did not support breaking large contracts into smaller pieces saying, "We like the big ones." [#46a]

**Price or evaluation preferences for small businesses.** Some interviewees had positive comments related to price or evaluation preferences for small businesses. [e.g., #39a, #45a, #46a, #47, #49, #51, #52, #53, #55, #57, #59, #60, #61] For example:

- The non-Hispanic white male owner of a specialty construction firm stated that he thought price preferences for small businesses would be helpful. He also stated that he is aware of some public agencies that have thresholds where projects under \$25,000 can be awarded to anyone they choose, but the project must go public if it is over that amount. [#37]
- The non-Hispanic white male owner of an engineering firm when asked about price or evaluation preferences for small businesses commented that he was unsure about how such a program can work. [#42]
- The non-Hispanic white male representative of a general contracting company stated, "I think [price or evaluation preferences for small businesses] would be beneficial." He said that this is "because it would make an even playing field, it would take away some of the risk [of including DBE firms that have somewhat higher costs in their bid] because many times we'll look out and say, 'Well, we know we got to be low [bidder] to get the job.'" [#41]

**Other business owners had negative comments or were not sure of the benefits of price preferences.** For example:

- The Hispanic American male owner of a specialty contracting company said that it is difficult to determine the benefit of price evaluation preferences for small businesses. He also reported receiving a contract award when his price has been the higher bid. He said he is not sure why he received the bid or if this practice is fair to other bidders. [#40]
- When asked if price or evaluation preferences for small businesses would be helpful, the Subcontinent Asian American male owner of a DBE-certified

transportation services firm commented, “Anybody who has the lowest price should get the bid.” [#54]

**Small business set-asides.** The study team discussed the concept of small business set-asides with business owners and managers. This type of program would limit the bidding of certain contracts to firms qualifying as small businesses.

**Many business owners and managers supported small business set-asides.** [e.g., PF#14, PF#15, WT#14, WT#24, #12, #13, #14, #17, #28, #29, #34, #37, #38, #39a, #42, #43, #44, #45a, #46a, #48, #49, #50, #51, #52, #54, #55, #56, #57, #58, #59, #60] For example:

- The male representative of a DBE-, WBE-, Woman-Owned Small Business (WOSB-), and SBE-certified sales-related firm commented, “...I do know that in some agencies...for example, Los Angeles Metro...they will actually take a scope of work out of a large prime contractor’s contract and award it as a set-aside to DBE’s and SBE’s. We’d like to see more of that done on a State level and with other cities.” [PF#19]
- The female Hispanic American representative of a DBE-certified firm reported that L.A. Metro initiated a set-aside program and she recommends that Caltrans do the same. She remarked, “This [Small business set-aside program] is the best milestone you can achieve for DBEs in California, hands down.” [WT#19]
- The Black American male owner of a DBE-, MBE-, and CPUC-certified specialty construction firm said he is aware of a city that has small business set-asides. He stated that he has benefited from a few contracts under this city’s program, and he believes the system in place for small business set-asides is good for these businesses because the program focus is not about race or ethnicity but small business. [#47]

**Some business owners expressed concerns about small business set-asides, did not support them, or were not familiar with them.** [e.g., #10, #11, #53] For example:

- The Hispanic American male owner of a specialty contracting company stated that small business set-asides are not fair to other businesses. He said, “I don’t think it would fair because if I was on the other side, that is how I would feel. I think that we have to be fair to everybody and what is fair is...hard for me to say what is fair. I can’t say whether it will be good or bad.” [#40]
- The non-Hispanic white male owner of a specialty construction firm reported that he did not believe small business set-asides were a good idea. He said, “I just think that there is a lot of expense to try to develop such programs. If you do things in a most efficient way, [work] will trickle down [to the smaller businesses].” [#18]

- The non-Hispanic white male representative of a general contracting company said that small business set-asides are fine only for “projects that are the sweet spot for those disadvantaged businesses.” He continued saying, “I think it’s an effective tool, one that we [contractors] can really control, but the agencies can use to help with their overall participation.” [#41]
- The Black American male owner of a DBE- and SBE-certified contracting firm said, “I’d have to say no [to small business set-asides] because the problem is that when you use the term small business, it covers such a big parameter that is not just my business size. It would be any business doing less than \$17 million a year.” [#61]

**Mandatory subcontracting minimums.** Some interviewees supported the requiring of a minimum level of subcontracting on projects would be helpful. Other interviewees did not.

**Many interviewees commented in support of a mandatory subcontracting minimum program.** [e.g., #7, #9, #16, #17, #38, #39a, #40, #42, #43, #44, #46a, #48, #49, #50, #51, #52, #54, #56, #57, #59, #60] For example:

- The non-Hispanic white male owner of a specialty construction firm stated that mandatory subcontracting minimums make sense on big projects; but, on smaller projects, they do not make sense because small contracts are better suited for small contractors as primes. [#37]
- The non-Hispanic white female owner of a DBE-certified consulting firm reported, hesitantly, that they might help small businesses begin to establish relationships. She said that when her firm first became DBE-certified, “Some of those large firms would sub with me just because there was a requirement. Now, they will sub with me because they know I am good.... I think the same thing could happen if there was a requirement to try working with small businesses. Then we establish a relationship and then it does not need to be mandatory anymore. I hate to say you must, but I think if at least for a period it was tested, it would give the opportunity to many small businesses to establish some relationships that would really help them.” [#55]
- The Subcontinent Asian American representative of a DBE-certified specialty engineering business suggested, “The DBE goals should be 20 percent and [a] minimum number of DBEs be specified.” [WT#9]

**Some interviewees did not support the idea of mandatory subcontracting minimums or did not think they would be effective.** [e.g., #37, #47, #61] For example:

- The non-Hispanic white male owner of an SBE-, DVBE-, and SDVOSB-certified consulting firm stated, “Generally I’m not for all that.” [#45a]
- The non-Hispanic white male representative of a DBE-certified construction-related firm reported that he did not think mandatory subcontracting

minimums would be worthwhile. He stated, “It seems like we’re layering more confusion into those kinds of contracts and deals. If we are going to help a small business, now we are going to allow them to do other sub-contracts and it just seems to me there is a lot of governmental construction in the way. I think sometimes the government gets too big and too involved in these kinds of things.” [#53]

**Small business subcontracting goals.** Interviewees discussed the concept of setting contract goals for small business participation.

**Many business owners and managers approve of small business subcontracting goals and some suggest that goals be set or expanded.** [e.g., #2, #4, #5, #7, #11, #38, #39a, #40, #42, #43, #46a, #47, #49, #51, #53, #54, #55, #56, #58, #61] Examples of comments include:

- The non-Hispanic white male owner of an SBE-, DVBE-, and SDVOSB-certified consulting firm stated, “I’m actually for [small business subcontracting goals]. I think it helps small businesses.” He added, “From my perspective the 3 percent DVBE works really nice on my part.” [#45a]
- The Black American male representative of a minority trade organization stated that he “absolutely” supports small business subcontracting goals. He added, “Not just goals, but legislation with the goals.” [#52]
- The Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm reported that “Caltrans does not make anything mandatory [regarding goals] and that is where the program falls on its face.” She stated that it would help to have programs in place that assist the general contractors with facilitating the goal requirement and not just leave it up to the general contractor. [#3]

The same business owner cited an example where a state agency project, at the time of the bid, set a goal of nineteen percent. The interviewee later discovered that the general contractor had only satisfied twelve percent of the goal. She remarked that not meeting the goal showed a lack of commitment to the program. She added that when her firm is involved in mandatory goal bids, the amount of information they need for estimating purposes expands dramatically. [#3]

- The female owner of a DBE-, SBE-, and WBE-certified construction-related firm remarked, “How does supporting multi-billion dollar corporations actually meet the intentions of small-business goals?” [PF#17]

The same business owner added, “The fact that it may be easier to deal with the technology that these [large] companies offer, there is no way possible small business can afford the lobbying, deceptive marketing these [large] companies have at their disposal.” [PF#17]

- The male representative of a DBE-, WBE-, SBE and WOSB-certified sales-related firm commented, “I think in a lot of the contracts where there is a DBE participation goal, there isn’t enough teeth in it to support forth and enforce that goal.” [PF#19]
- The Subcontinent Asian-American president of a DBE-certified engineering firm recommended an increase in DBE goals for engineering, design, and data collection projects. In addition, he offered suggestions for increased UDBE goals [additional 10 percent] and encouragement given to DBE firms to bid projects as primes. [WT#29]
- The Black American male owner of an MBE-certified trucking firm said he thinks DBE subcontracting goal programs “sound great,” but he has not had any experience with them. [#25]
- The Hispanic American female owner of a WBE-, SBE-, and MBE-certified general contracting firm, regarding DBE subcontracting goals programs, stated, “I think [DBE programs are] great.... I think if you can qualify under a DBE...it opens many doors that are normally shut....” [#13]
- The non-Hispanic white male owner of a concrete inspection agency noted that larger businesses have an advantage in certain circumstances “...that they take everything in-house.... With small business subcontracting goals that would ensure smaller firms have an opportunity.” [#59]
- The Black American male owner of a DBE- and MBE-certified construction company stated that small business subcontracting goals can actually help small firms get contracts. [#60]

**Some businesses indicated that small business subcontracting goals are not desirable, are challenging, or said that the goals should have limitations.** [e.g., #10, #37] For example:

- The representative of a construction-related business remarked, “Over the last several years the DBE goals for Caltrans projects have significantly increased.” He added, “...the DBE program should be to help small business into the market place to get established, once established that small business should not have such status, the market place needs to be fair for all businesses involved.” [WT#6]
- The female representative of a majority-owned construction firm reported, “We have to make so much of the project available to DBEs/DVBes, in doing so we have priced our self out of projects, if we had done this with our own force the costs would be less.” [WT#23]
- The non-Hispanic white female owner of an SBE-certified specialty contracting business said she could not comment on DBE subcontracting goals programs because she does not understand them. [#24]

- The Black American male owner of a specialty contracting business stated that he was only vaguely aware of DBE subcontracting programs. [#27]
- The non-Hispanic white female owner of an SBE-certified specialty consulting company when asked about DBE subcontracting goals said, “I don’t really know why they have them at all.” [#20]
- The non-Hispanic white male representative of a general contracting company said that small business subcontracting goals are helpful for small businesses. He, however, reported concern that the DBE subcontracting goal percentages for disadvantaged businesses are rising to levels that are difficult to achieve commenting, “We’re running out of...disadvantaged contractors and their capability to do the work.” [#41]
- Though he supported small business contracting goals, the non-Hispanic white male owner of an SBE-certified consulting company noted that programs be closely monitored. He offered the example of an “on-call or as-need” contract, where the prime claimed to have achieved 20 percent small business participation at the time of award. He reported that his firm only received one very small task order; and, at the end of the project, only a small percentage of SBE task orders were given. He said that the prime kept most of the work in-house, and there were no penalties imposed for not achieving the stated SBE goal. [#44]
- The Black American female owner of a DBE- and SLBE-certified construction-related business when asked if small business subcontracting goals are helpful, replied, “...a lot of firms use their internal employees to make [their] numbers [work].” She further stated, “I was at the commission meeting for a Southern California municipality a couple of years ago, and [a large prime contractor] came in and...said ‘we use our internal employees to count for projects to meet the goals.’” [#48]

**Formal complaint and grievance procedures.** There were a number of wide-ranging comments, including those who support procedures to resolve complaints and grievances. [e.g., #37, #38, #39a, #39b, #43, #44, #45a, #46a, #47, #49, #50, #52, #53, #54, #55, #57, #58, #59, #61] For example:

- The Hispanic American male representative of a DBE- and SBE-certified specialty supply firm commented that he is not aware of any formal complaint and grievance procedure, and he would appreciate a mechanism for notifying agencies of a prime’s failure to pay. [#11]
- The non-Hispanic white male owner of an engineering firm reported that formal complaint and grievance procedures “are essential to keep everyone out of court.” [#42]

- The Hispanic American male owner of a specialty contracting company reported that formal complaint and grievance procedures would be “one of the best things for small business.... Some people will take you to court for anything.” [#40]
- The non-Hispanic white male owner of a specialty contracting company said that formal complaint and grievance procedures are important because “no one wins if you go to court.” [#51]
- The non-Hispanic white male representative of a general contracting company said, “I think [formal procedures are] important and [there] must be a good strong dispute resolution process...especially with Caltrans.” [#41]

**Some business owners did not find complaint procedures helpful or had no experience with the procedures.** [e.g., #7, #10, #19] For example:

- The non-Hispanic white male owner of an SBE-certified specialty contracting company said that formal complaint and grievance procedures are “not worth the hassle....” [#32]
- The Subcontinent Asian American female representative of a minority woman-owned DBE-certified supply firm commented, “...to be honest, I don’t really complain that often. So, it would be a good thing for people but I think that at the same time, it’s not necessarily a good thing because there are some people that complain just to complain.” [#56]
- The Black American female owner of a DBE- and SLBE-certified construction-related business stated, “[The formal complaint and grievance procedure] doesn’t work.... It is like the protest. And it doesn’t work.” [#48]

**What works well about Caltrans’s contracting processes and suggestions for improvement.** Some responses were positive, and others were negative. For example:

- When asked if there is anything about the Caltrans contracting process that works well, the non-Hispanic white male owner of a SBE- and DVBE-certified specialty construction firm responded, “No, no.” [#8]
- The Black American male owner of a DBE- and SBE-certified contracting firm stated that nothing right now is working well with Caltrans’s contracting process for his firm. He explained that it “depends on who you are. If you’re in their system and you’re one of their contractors, then the contracting process is working well.” [#61]
- The non-Hispanic white female owner of a DBE-, SBE-, and WBE-certified specialty contracting firm stated the things that work well with Caltrans’s contracting process are “...they have a lot of stuff online and I like that. You go in and check what has approved, what is paid, they have their goals, and they



have good faith efforts. I particularly like the material on hand because that helps us.” [#38]

The same business owner indicated her desire for all agencies to reduce the amount of paperwork required for projects. “We need more online processes.” [#38]

- The Subcontinent Asian American female representative of a minority woman-owned DBE-certified supply firm when asked about what is working well with Caltrans’s contracting process, explained that “...the online resources [which tell] other subcontractors or other suppliers about opportunities [work well].” [#56]
- The non-Hispanic white male representative of a general contracting company when asked what works well about Caltrans’s contracting process said that changing to electronic bidding and the dispute resolution board process “is good as anybody is in the industry.” [#41]
- The Hispanic American male representative of a DBE- and SBE-certified specialty supply firm said, “The [Caltrans] website and the bid opening [works well]. Sometimes it works to where you can listen in on the bid opening; that is how we find out.... They have improved that.... Before, you would listen to it maybe a couple of days before they released the results. Now it is almost the hour or two later that [you can find out the results]. So they’ve improved that process.” [#11]
- The non-Hispanic white female owner of a WBE-, SBE-, and DBE-certified specialty construction firm when asked what works well about Caltrans’s contracting process responded, “...[Caltrans] give[s] everybody a lot of time to go through a project, and...[one thing] I love about Caltrans is there aren’t many addendums.” She added that Caltrans is “good about advertising [upcoming projects].” [#22]
- The non-Hispanic white male owner of an SBE-, DVBE-, and SDVOSB-certified consulting firm commented, “Well they design highways they’re pretty good about that. They did it one time about ten or fifteen years ago.” [#45a]
- The Black American male owner of a DBE-, MBE-, and CPUC-certified specialty construction firm when asked what works well about Caltrans’s contracting process reported that he has not been actively pursuing Caltrans work for a year, so he cannot speak definitively. He commented that he knows people who actually perform Caltrans work, and he heard that doing business with Caltrans has improved. [#47]
- The Subcontinent Asian American male owner of a DBE-certified engineering firm reported that he has “had one experience working with the Caltrans [and] it was excellent.” He believes that that Caltrans does a lot to help small

business, and he is in “business today because of the job I got with Caltrans. If not for that contract, I think I would be gone.” [#12]

The same business owner also reported, “One thing good [about Caltrans’ contracting] process is [they] have...two places...Southern California and Northern California, [where] we submit the bid. [Another] good thing [is that] we can see the bid on time. [Caltrans also has the] Minor B program, that’s also good.” [#12]

- The Hispanic American female owner of a MBE-certified specialty services firm when asked if anything about the Caltrans process works well said, “There is lots of opportunity and jobs for bid and the process is pretty basic and simple.” [#5]
- The non-Hispanic white female owner of an SBE-certified specialty contracting business when asked if there are any ways Caltrans can improve their contracting process said, “Don’t make it so complicated.” [#24]
- The Subcontinent Asian American male owner of a DBE-certified transportation services firm commented, “You know, I haven’t had much time for business assistance programs. I wish it was more, it would help us, you know. It helped me to get the minority certification. That was all they had. When it comes to creating jobs, I have never seen any help. Even Caltrans people do not help much. It’s very hard to get to a hold of people, it’s pretty hard.” [#54]
- The non-Hispanic white male representative of a general contracting firm when asked what works well about Caltrans’s contracting process said, “The movement towards the electronic bidding.” [#26]
- The non-Hispanic white male representative of a DBE-certified construction-related firm stated that nothing right now is working well with Caltrans’s contracting process. [#53]
- The Black American male owner of a DBE- and MBE-certified construction company stated that the online advertisement process is working well with Caltrans’s contracting process. [#60]

**One interviewee offered other ideas to encourage small business participation.**

- The non-Hispanic white male representative of a general contracting company stated that there may be better ways to encourage participation from smaller firms than the ways currently employed saying, “I’m a firm believer in incentives rather than disincentives.” He added there are numerous public agencies that require that established project goals to be met if you are to be awarded projects. He noted that many times the goals might be difficult to

achieve depending on the project; and, in those cases, good faith efforts are not considered. [#41]

## **I. Insights Regarding the DBE or SB/DVBE Program or any other 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 SB/DVBE and DBE contract goals:

- Caltrans or other public agency DBE or SB/DVBE subcontracting goals programs (*page 166*);
- Helpfulness of DBE or SB/DVBE program (*page 171*);
- Business impact of DBE and SB/DVBE programs (*page 173*);
- Reasons not to become certified (*page 174*);
- Effects of changes in DBE program between 2006 and 2008 (*page 175*);
- Differences related to FHWA waiver (*page 176*);
- Additional Caltrans or other public agency programs (*page 177*);
- Successes related to DBE or SB/DVBE program (*page 179*);
- Any issues regarding Caltrans or other public agency monitoring and enforcement of its programs (*page 180*);
- Any adverse effects of programs on businesses not eligible for the programs (*page 187*); and
- Any MBE/DBE or supplier diversity programs in the local private sector (*page 188*).

### **Caltrans or other public agency DBE or SB/DVBE subcontracting goals programs.**

Interviewees reported their awareness of or experience with public agencies' subcontracting goals programs and expressed the importance of goals programs. [e.g., #14, #15, #19, #22, #34, #38, #39a, #44, #46a, #51, #55, #56, #57, #61]

- The non-Hispanic white male owner of a specialty construction firm said he is aware of DBE subcontracting goals programs. He also stated that he would like to participate in them. [#37]
- The non-Hispanic white male representative of an SBE-certified engineering firm regarding the importance of subcontracting goals said, "Yeah, I think sometimes [they are a benefit]." He explained that it could be difficult because there are no DBE surveyors in his city. [#28]
- The Black American female owner of a DBE- and SLBE-certified construction-related business stated, "You need to see more federal dollars on the projects. Because that is the only way that [projects are] really going to [reach out to]

small businesses.... [If prime contractors are] not required to have [DBE subcontractors] they do not do it. So more federally funded projects would really help." [#48]

- The Native American male owner of a DBE-certified construction-related firm reported that he is aware of L.A. Metro's DBE subcontracting goals program but noted that he has never done business with L.A. Metro. [#49]
- The Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm reported that DBE goals should be mandatory to guarantee that the DBE marketplace actually gets the funds. [#3]
- The non-Hispanic white female owner of a WBE-certified specialty construction firm reported, "...I think that it is positive...that [prime contractors] have to use [DBEs because of the subcontracting goals]. Very much so...100 percent." [#7]

The same business owner added that DBE goals are good for the construction industry because a good percentage of her work is the direct result of her status as a WBE, and she would likely not see that work without the programs. [#7]

- The Subcontinent Asian American male owner of a DBE-certified engineering firm stated that instead of using "a 10-percent goal, they need to make a set-aside project for the small business." He said that, particularly for smaller projects, the government wastes money on plans when they could just offer the scope of work to small engineering businesses and let them figure it out. He reported, "There is nothing for the qualified people, like engineers, who want to do construction. [I think providing a scope of work] can save more tax money.... It is the welfare of our state and all of the people who are paying a lot of taxes." [#12]
- The Black American male representative of a general contracting firm stated that the company emphasizes, "We don't really care about people's personal ideas about any law. The only thing that we care about is that they comply with it, or if they can't comply with it, they let the appropriate person know." He said, "The Company is very supportive of its obligations under the DBE laws and all of our other similar laws." [#26a]
- When asked about DBE subcontracting goal programs, the non-Hispanic white male owner of an architecture-related consulting firm said, "It's beneficial in the sense it helps level the playing field," He added, "...where I think it gets difficult is when [there are] situations where we are the prime [Local Business Enterprise] on a project." "...We then still need to have LBE subconsultants, some of whom we have to add to our RFP, even if we don't need them." He said that it is challenging when the scope is "really not totally clear exactly what it

is we're going into, [and we are required to] throw in consultants and then we're locked in." [#30]

- When asked whether certifying his company as a minority-owned business on certain federal projects has helped his firm, the Hispanic American male owner of a specialty contracting business responded, "We've benefited from it, in some cases...well, I guess it would be financially because we've been successfully awarded a project. I've never been told specifically that it's because we brought a minority or small business status to the table per se, but it certainly was looked at favorably." [#9]
- The non-Hispanic white male owner of an SBE-certified specialty consulting company reported that he felt that strict adherence to a set formula rather than looking at each project individually leads to some projects not having the best contractors for the job. He said, "[The DBE goal is] just a formula; and that's where I think it gets lost." He added, "They are hiring based so they can have equal opportunity.... I'm all for equal opportunity and I'm all for bringing disadvantaged to the forefront. But, they put this rate of 5 percent or whatever.... Well, when you're grading between me and, say, a Hispanic-owned company, I lose because the percentage is so variable that they're not putting the emphasis on longevity; they're not putting the emphasis on experience." [#29]
- The female representative of a CPUC WBE-certified specialty construction firm reported that her company sometimes receives requests for bids because they are a woman-owned firm. She said, "Every once in a while we'll get someone who will call and say, 'Are you woman-owned?' ...we will say, 'Yes.' ...They will say, 'Okay. Can you bid this because I need five percent of my bid to be a woman-owned [company]?' " [#16]
- The Black American male owner of a DBE- and MBE-certified construction company commented that he thinks the goals programs are good but that "not all opportunities are good for one reason or the other. It may be the contractor, the available sub work, or the length of the contract that may not be appealing. So, although the goals are there, the conditions of the contract and that alignment may not be good for business." [#60]

**Some interviewees reported little or no awareness and experience with public agencies' subcontracting goals programs or offered mixed views.** [e.g., #31, #35, #40, #43, #45a, #53]  
For example:

- The non-Hispanic white male owner of an SBE-certified specialty consulting company stated that he thought DBE subcontracting goals programs were good but said, "I don't know what the purpose of the whole thing is, you know.... Is it because they want small businesses to have more of the work or is it because that they're under some mandate to do it? You know, it seems to me like it's all about the mandate to get that done." He said that because it seems

like the DBE program only exists because it is required, prime contractors are not truly committed to meeting DBE goals. [#17]

- The Subcontinent Asian American female owner of a DBE- and LWBE-certified engineering firm supported DBE subcontracting goals but said that they are not enforced strongly enough. She said, “In the area that my firm does most of its work, the public sector has set percentages for minority subcontracting...If you do not comply...[your] proposal is non-responsive.... They have a good program, but they are not that strong, they are not that forceful.” [#50]
- The non-Hispanic white male representative of a general contracting company said, “[The DBE/SBE/DVBE program] has not affected us negatively because we have figured out early on that we’ve got to do this.” He added, “There have been times when other [companies] have not [properly satisfied DBE bidding requirements].... They have had issues when we have gotten the project because we were next in line.... We have [also] lost some [bids] because we didn’t have things right either.” [#41]
- The non-Hispanic white male owner of a specialty construction firm stated, “I mean, for me...I think it costs a lot of money to oversee things like that. I do not know. It does not matter what your race is...but I do not know. I am kind of old school. I just feel you know, ‘let me have the opportunity, but don’t give me any special [treatment].’” [#18]

**Some reported benefitting, or expecting to benefit, from DBE or SB/DVBE contract goals.** [e.g., #12, #15, #39a, #50] For example:

- The non-Hispanic white male owner of a specialty construction firm stated that DBE, SBE, and DVBE programs could “make some firms millionaires overnight if they can get in and perform the work. It could be huge [for those firms].” [#37]
- The Native American male owner of a DBE-certified construction-related firm when asked if the DBE program been helpful to his firm said, “Not yet...but I have hope.” [#49]
- When asked if the DBE program has ever been helpful to her firm, the Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE- certified specialty construction firm said, “Yes, [the firm] would never have been involved in public works projects without the DBE program.” She remarked that had a prime not brought the program to their attention they would not have known about it. [#3]

The same business owner reported that, presently, thirty percent of her firm’s opportunities come from their DBE designation. It “gets them in the door.” [#3]

- The Black American male owner of a DBE-, MBE-, and CPUC-certified specialty construction firm said the DBE program has been helpful to his firm but only in the public sector. [#47]
- The owner of a WBE-certified transportation firm reported, “It helps me get work out there because I’m a WBE-certified [firm]. People will take bids from me and give me work if I have that [certification]. That’s important to a lot of prime contractors.” [#34]

**Some interviewees felt that race- and gender-based programs were little to no help to them even though they participate in them.** For example:

- The Hispanic American female owner of a WBE-, SBE-, and MBE-certified general contracting firm reported that her firm’s WBE certification has been only moderately helpful in securing opportunities for her firm “because [the certification is for work mostly done] in the private sector [due to license limitations], I haven’t had too many [opportunities from it]. But I know that if I would have had [a WBE certification] more for the commercial [sector], I would have been able to really take advantage of it.” [#13]
- The Black American male owner of a DBE- and SBE-certified construction-related firm reported that prime contractors could often fulfil their DBE requirement too easily. He stated that primes will “hire one trucking company, and...maybe one other supplier, and then their [DBE] requirement is met. So they don’t need anything else.... They don’t need me.” [#19]
- The non-Hispanic white female owner of a WBE-, SBE-, and DBE-certified specialty construction firm when asked if the DBE program has been helpful to the business stated, “I am never sure. Honestly, I think I’m about even now for how much money I’ve lost versus how much money I’ve made.” [#22]
- The Black American male representative of a minority trade organization stated, “A lot of people can be certified as DBE but they choose not to. [Many] Black truckers do not care for those programs. The bottom line is [that] it is a game. This is just like Vegas. It is designed for [the agencies] to win or whomever they want to win. It’s designed for us not to win.” [#52]

**Some interviewees were critical about key aspects of the implementation of the Federal DBE Program.** For example:

- The non-Hispanic white male owner of a SBE- and DVBE-certified specialty construction firm when asked if the DBE program has ever been helpful to his firm responded “No.” [#8]

The same business owner expressed his thoughts about preference given to DBE firms over the DVBE firms stating, “everybody. They are military people, they gave up part of their life, they went

and fought some stinkin' war...and most of them never do any good. Still, they did that, and now they come back and they are DVBEs and they have to stand

**One firm recommended that good faith efforts no longer be considered an acceptable substitute for DBE participation.**

- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm stated that Caltrans should “eliminate good faith effort because the good faith effort is just...[unfair].” [#10]

**Some had comments on others programs, including small business and veterans' programs.**

- The non-Hispanic white male owner of a specialty contracting business reported that Alameda County has a program where he can take five percent off the bid if he has minority employees. [#31]

**Helpfulness of DBE or SB/DVBE program.** Some interviewees commented on the helpfulness of the programs.

**Several interviewees reported that their firms have been helped by DBE, WBE, or SB/DVBE programs.** [e.g., #11, #12, #17, #28, #38, #39a, #45a, #53, #55, #56, #57] For example:

- The Black American male owner of a DBE-, MBE-, SBE-certified specialty construction firm when asked if the DBE program had been helpful to his business stated, “Absolutely, absolutely because there’s no way I’d be here if it wasn’t.... It has worked and it does work.” [#10]
- The Hispanic American male owner of a DBE-certified construction firm reported, “... I think it’s very important for the program for minority and women and to keep the program going so we are successful.... It’s good for everybody, because it’s not only one group of people that’s getting the pie, but it spreads it out...with all races...not just one....” [PF#14]
- When asked if certification has been helpful to her firm, the non-Hispanic white female owner of a WBE-certified specialty construction firm said, “I would say a pretty good amount. I don’t know (the) percentage, but [it is] a pretty good amount. When you’ve been in business as long as I have, you don’t really pay attention to that because you have your customers that will stick with you. You’ve built relationships with companies and those are the companies you see the most of. But I know that it does help if they need a WBE.” [#7]
- The Hispanic American male representative of a DBE- and SBE-certified woman-owned engineering firm stated that the DBE program has “been hugely helpful for us.” He said, “We’ve gotten a lot of work just because of [our DBE certification].... We definitely took full advantage of it. [If jobs] didn’t have



a DBE goal, we knew we were just not going to be in the running for something.” [#23]

- The Black American male owner of a DBE- and SBE-certified construction-related firm indicated that the DBE program was critical to the firm “in the beginning.” He said he still gets work from the DBE program but that it alone is not “substantial enough to maintain a business [anymore].” [#19]
- The non-Hispanic white male owner of an SBE-certified specialty consulting company stated, “There are some benefits [to being SBE certified] but it isn’t something that’s make-or-break.” [#29]
- The non-Hispanic white male owner of an SBE-certified consulting company said that his firm has not won any work as a prime specifically because of the SBE program but noted that his firm receives invitations to team up with other firms for work because of the SBE certification. [#44]
- Regarding helpfulness of the programs, the Black American male representative of a minority trade organization responded, “To some extent...yeah, it has been for some.” [#52]
- The Hispanic American male owner of a DBE- and MBE-certified specialty contracting company reported that the DBE program had been helpful to his firm saying, “It gave us a place to start, a place to plant our feet and move forward. Other than our connections, we were reaching out to people and they wouldn’t give us the time of day sometimes but...[after engaging with the DBE program] they at least listened to us. Yeah. Even if they didn’t use us, they knew we were out there.” [#46a]
- The Black American male owner of a DBE- and MBE-certified construction company reported that the DBE program has been helpful and has offered him a lot of opportunities, some that he was not able to capitalize on. He added, “I think there’s a few things that can be done to it to make it better.” [#60]

**A few interviewees said participation in the DBE or SB/DVBE programs has not helped their business, or helped only slightly.** [e.g., #32, #39a, #48] For example:

- The Hispanic American male owner of a DBE- and MBE- certified supply firm reported, “The DBE-program has not helped us at all. Zero.” [PF#1]
- The Black American male owner of a DBE- and SBE-certified contracting firm responded that the DBE program is no longer helpful to his firm. He said, “It’s not helpful because it hasn’t been like implemented properly. If I just say that, it is not helpful that could lead to believe that it is [unneeded], but it is.... The need is there.” He said that the DBE program is unhelpful because prime contractors abuse the good faith efforts process instead of hiring DBE-certified subcontractors. [#61]

- The female owner of a DBE-certified specialty transportation firm reported challenges she has faced with lack of communication and follow-up assistance from the DBE Program. She remarked that once she had the certification she was unable “to get information on what to do next....” [WT#26]
- The Subcontinent Asian American male owner of a DBE-certified transportation services firm commented, “I don’t know. I cannot say yes. But I don’t want to say no either.” He added, “I haven’t had any jobs from DBE certification.” [#54]
- The Hispanic American female representative of a DBE-certified firm commented, “For me it [has] been so hard.... I want to bid but I don’t know how to do it and win.” [WT#5]
- The male representative of a certified specialty service firm commented, “I am finding disparity a lot, I have most of the certs, but I almost never get the bid.” He attributes this to a pre-existing preference on the part of the client to work with certain companies. [WT#4]

**Business impact of DBE and SB/DVBE programs.** For example:

- The non-Hispanic white male owner of an SBE-, DVBE-, and SDVOSB-certified consulting firm noted that DVBE certification affects his business. He said, “There have been opportunities that I would never have gotten without that designation.” [#45a]
- The Native American male owner of a DVBE-certified transportation firm indicated he has been able to grow his business in a short amount of time by “hustling and going after that [DVBE] work....” [#57]
- The Black American male owner of a DBE- and SBE-certified contracting firm indicated that at one time, the DBE program enhanced his business. He noted that he could respond to bids and satisfy the DBE goal 100 percent because he was certified. [#61]
- The Subcontinent Asian American female representative of a minority woman-owned DBE-certified supply firm when asked how the DBE program impacts her firm’s business said, “Oh, positively, 100 percent.” She added, “Bigger corporations will not give you the time of day unless you have that certification. Two companies specifically wanted to use us because of our DBE [certification]. Now, they kept using us because of our customer service and our DBE [status].” [#56]
- The non-Hispanic white male owner of a specialty construction firm said that he would have pursued DBE certification if it were more readily available. He stated that he would like his wife to become certified. [#37]

- The non-Hispanic white female owner of a DBE-certified consulting firm indicated the DBE and SBE program affected her firm positively. She noted that the certification has helped to get more business. [#39a]
- The non-Hispanic white female owner of a WBE-certified specialty construction firm said that a “good percentage” of her work is directly attributable to the DBE program. [#7]
- The Black American male owner of a DBE-, MBE-, and CPUC-certified specialty construction firm stated he would prefer to receive business because he is a good contractor rather than because his company is certified as a DBE. [#47]

The same business owner reported that prior to certification he would get requests for bids but was asked if his firm held certification as a DBE. When he said his firm was not certified, the responses would be “sorry we are only looking for certified firms.” [#47]

- The non-Hispanic white male representative of a general contracting firm noted that the DBE program is “part of our competitive landscape, so I cannot really say that it has affected the business positively or negatively. I mean, everyone who wants to do public work is kind of on the same playing field.” [#26]
- The Black American male owner of a DBE- and MBE-certified construction company stated that the DBE program opened the doors to bid on certain jobs. He said, “I would not have had the opportunity to bid on some of the projects without certification.” [#60]

**A few Business owners and representatives reported no impact on their firm from DBE or SB/DVBE programs.** [e.g., #53] For example:

- The Black American female owner of a DBE- and SLBE-certified construction-related business stated, “It really doesn’t. It does not bring any business in. It brings a lot of inquiry into, ‘can you bid on this’...and then, when I send them my rate, more likely they’ll ignore my bid.” [#48]

**Reasons not to become certified.** Several interviewees reported choosing not to pursue DBE or SB/DVBE certification, or are ineligible and discussed their reasons. [e.g., #31, #52] For example:

- The non-Hispanic white male owner of a specialty construction firm commented because “I’m a white guy. I’m supposedly, I have all the advantages there are.” [#18]
- The Subcontinent Asian American male owner of an architecture and design firm said that his firm chose not to proceed with certification because they

“learned that even if you have the DBE designation, without the past public works experience, it won’t help that much.” [#6]

The same business owner indicated that the firm received MBE-approval, but they never paid the fee to complete the certification. He repeated that he does not see the point of gaining certification since public agencies want firms to have prior experience with that specific agency. [#6]

- When asked why he has not sought DBE certification, the Black American male owner of a specialty contracting business reported that he has not felt he needed the certification so far. He said, “I’ve always known that there was [a] program...and I understand why [it was] established.” [#27]
- The non-Hispanic white male representative of a Subcontinent Asian American MBE-certified services provider said, “DBE certification isn’t something they are interested in because that’s not the type of work they do.” [#21]
- The Hispanic American male owner of a specialty construction company stated that DBE certification has not been necessary for his firm. He said that his firm is “always busy and not looking for more work.” [#40]
- The Hispanic American male owner of a specialty contracting business when asked why his firm has not applied for state DBE certification stated that it is due to “lack of time. [The DBE certification process is] a little cumbersome.... I think because of the stigma that is associated with the [DBE certification] process...it makes it something that gets put on the shelf.” [#9]

**Effects of changes in DBE program between 2006 and 2008.** The study team asked interviewees whether they had experienced any positive or negative changes when Caltrans discontinued setting DBE contract goals in 2006, or when they restarted setting goals on federally funded construction contracts in 2008.

**Some interviewees reported negative experiences following the 2006 change or noticing positive changes in 2008.** For example:

- When asked if she had noticed any effects from changes in the Caltrans DBE programs in 2006 and 2008, the Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm stated that there was a “huge lull in opportunities” during this time. She reported that the changes, in effect, created a “good ol’ boy” network. [#3]
- The non-Hispanic white female owner of a WBE-certified specialty construction firm when asked if she had noticed any effects from changes in the Caltrans DBE programs in 2006 and 2008, not remembering in detail, reported that this might have been about the time that “things got tough for a while.” She added that this might have been during the time they lost their certification and had to reapply. [#7]

- The Hispanic American female owner of a MBE-certified specialty services firm when asked for any positive or negative effects from changes in Caltrans programs in 2006 and again in 2008, said she remembers that before the discontinuance of the DBE program her firm had already started the application process. She reported that when the change went into effect she decided against pursuing the DBE certification because it was pointless. She subsequently moved forward with an application with the reinstatement of the program. [#5]
- The Black American male representative of a general contracting firm reported seeing “a big difference. We work all over the country, and Florida has what we call a race neutral program, which is what California went to in that three-year period. It’s much more conducive to doing work and getting everything done on a partnership basis.” He said the company continues the mindset “that we want to help small businesses. So like, in Florida we always report and do enough DBE credits so they’re staying race neutral.” [#26a]

**Many interviewees reported experiencing little difference or not noticing the changes in 2006 and 2008.** [e.g., #23, #39a, #41, #45a, #46a, #47, #48, #49, #51, #53, #54, #55, #56, #59, #60, #61]

- The non-Hispanic white male owner of a specialty construction firm stated he was not aware of any effects from changes in Caltrans programs in 2006 or 2008. [#37]

**Difference related to FHWA waiver.** The study team asked interviewees if they experienced any changes in 2008, when Caltrans implemented a waiver that did not include Hispanic- and Subcontinent Asian-American DBEs as counting toward DBE contract goals on federally assisted transportation contracts, or in 2012 when Caltrans began including all certified DBEs in DBE contract goals.

**Many interviewees reported seeing little or no difference resulting from the FHWA waiver or being unaware that there had been a waiver.** [e.g., #22, #39a, #41, #45a, #46a, #47, #49, #51, #52, #53, #54, #55, #56, #59, #60, #61] For example:

- The Black American male representative of a general contracting firm stated about the FHWA waivers, “I think [it] was a bogus excuse, personally.” He said, “They’re either DBE or they aren’t.” [#26a]
- The non-Hispanic white female owner of a DBE-, SBE-, and WBE-certified specialty-contracting firm reported that she was aware of the waiver. She noted, “I know that sometimes funding is what kind of drives the program. So there [are] little requirements in like to certified payroll stuff but in general I don’t see much difference when there is federal money.” [#38]
- The non-Hispanic white male owner of a specialty construction firm stated he was not aware of any differences related to FHWA waivers. [#37]

- The Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm said that her firm did not feel the impact because her WBE designation “took the place” of the MBE opportunities. She said that holding diverse certifications replaced opportunities taken away by the FHWA waiver. [#3]

**Some interviewees did report experiencing a change in business as a result of the FHWA waiver.** [e.g., #19] For example:

- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm, stated, “Before Caltrans changed from UDBE to DBE...the tables were stacked a lot more in favor of real small businesses.... Now I think any DBE company can...have gross annual receipts of...\$16 million or something. What small company has gross receipts of \$16 million.... [I think] that number has to be much lower.... That number should honestly be right around \$5 million a year....” [#10]

The same business owner reported that, prior to the change to the DBE program, the “UDBE program was real difficult for [prime contractors] to get around because the dollar limits were so low, so they had to try to do something. But then that also encouraged a different type of behavior...you know, where they would actually hire...[Black Americans] and put them at a card table and sit them out in front of a job site.... I have seen that happen in San Francisco.... It was the most disgusting thing I’ve ever seen.... So when they went to DBE, it raised the number up a lot so now they can compile and get their good faith effort.” [#10]

- The Hispanic American male representative of a DBE- and SBE-certified specialty supply firm reported that when Caltrans was using UDBEs, “It seemed like there were firms that...somehow went from a DBE to a woman-owned business...it seemed like...we lost quite a bit of business. And then when they [changed from UDBE back to DBE], our percentage of work went up tremendously.” [#11]

**Additional Caltrans or other public agency programs.** Interviewees were asked if they had any knowledge or experience with other race/gender-conscious programs administered by public agencies.

**Most interviewees reported little or no experience with other programs.** [e.g., #43, #45a, #51, #53, #54, #59] For example:

- The non-Hispanic white male owner of a specialty construction firm stated he was not aware of any additional Caltrans or other public agency programs. [#37]
- Regarding DBE programs from other public agencies, the Black American male representative of a general contracting firm reported awareness of, but little

knowledge of, other DBE programs. He mentioned, “We have some municipalities that we’ve dealt with...like Los Angeles County that have their own programs and then the utilities have their own program.” [#26a]

**A few interviewees reported experiences with other programs.** [e.g., #47] For example:

- The Hispanic American male owner of a DBE- and MBE-certified supply firm reported, “The certification that helped us was the PUC, Public Utility Commission.” [PF#1]
- The Hispanic American male owner of a DBE- and MBE-certified construction-related firm reported that he was aware of the former “Registered Environment Associated Program.” [PF#13]

The same business owner complained, “...they eliminated that program.... No hearings were held; no testimony was ever delivered.... It was done by the director...of that government agency.... That’s a disparity and discrimination....” [PF#13]

- The Black American male owner of a DBE- and SBE-certified contracting firm noted that he was aware of the DVBE program. [#61]
- The non-Hispanic white female owner of a DBE-, SBE-, and WBE-certified specialty-contracting firm noted she was aware of the DVBE program. She explained, “I like the programs and people at Metro. They are helpful.” [#38]
- The Black American female owner of a DBE- and SLBE-certified construction-related business reported knowledge of the “City of San Diego” as another public agency DBE program. [#48]
- The non-Hispanic white female owner of a DBE-certified consulting firm reported that she was aware of the DVBE program. [#55]
- The Hispanic American male representative of a DBE- and SBE-certified woman-owned engineering firm when asked about knowledge of any other Caltrans or other public agency programs for disadvantaged businesses stated that “I know some local agencies do have their own...slightly different [programs], but we don’t deal with those agencies.” [#23]
- Regarding any other programs, the non-Hispanic white male representative of an engineering firm reported, “My understanding is that our company doesn’t qualify for the Small Business Administration, as it’s defined for California. It has something to do with us also having our headquarters in [another state] and not here in California.” [#33]
- The non-Hispanic white male representative of a general contracting company when asked if he is familiar with any other Caltrans or other public

agency DBE programs said, “We’re familiar with the city of Los Angeles, Port of Los Angeles, the Port Long Beach, Los Angeles Airport Authority, and the County of Los Angeles.” He went on to say, “All of these public agencies all have a little different program.... They’re not all exact, but they are closer aligned.” [#41]

- The Black American male representative of a minority trade organization reported knowledge of other programs stating, “Metro’s program is pretty good.... Metro has that CUF [Commercially Useful Function] that is good.” [#52]

**Successes related to DBE or SB/DVBE program.** Interviewees reported successes related to DBE or SB/DVBE programs.

**Many business owners and representatives who had participated in DBE or SB/DVBE programs reported experiencing successes or having knowledge of successes within the programs.** [e.g., #5, #15, #38, #39a, #47, #52, #55] For example:

- The non-Hispanic white male representative of a general contracting company stated that he has no personal experience with successes related to DBE or SB/DVBE program. He said, “I’ve worked with a few project managers and watched them grow up out of the program, and become good businessmen.... Unfortunately, it’s gotten harder for these emerging contractors, because the industry is changing.... It’s tough out there.” [#41]
- The non-Hispanic white male owner of an SBE-, DVBE-, and SDVOSB-certified consulting firm said, “[DVBE-certification is] a tremendous resume builder.... You are included in work functions that you would never get a prime contract for.” He also said, “If DVBE is required by the prime contract, we are included.” [#45a]
- When asked about DBE or SB/DVBE program successes, the Hispanic American male owner of a DBE- and MBE-certified specialty contracting company stated, “...I’m not sure we’d still be in business without it.” [#46a]

**Several interviewees reported not being aware of any successes related to the DBE or SB/DVBE programs.** [e.g., #48, #49] For example:

- The non-Hispanic white male owner of a specialty construction firm stated he was not aware of any successes related to DBE or SB/DVBE programs. [#37]
- The non-Hispanic white male owner of an SBE-certified consulting company said that his firm has not experienced success through these programs; however, he reported that he does receive project notifications. [#44]



**Any issues regarding Caltrans or other public agency monitoring and enforcement of its programs.** Some interviewees had comments regarding the implementation of the DBE or SB/DVBE Program, including false SB/DVBE or DBE reporting by prime contractors or abuse of “good faith efforts” processes, “fronts,” and “pass-throughs.”

**Several interviewees reported that monitoring and enforcement of SB/DVBE and DBE programs is satisfactory.** [e.g., #46a, #47, #53, #57] For example:

- The non-Hispanic white male owner of a specialty construction firm stated he has a certified MBE colleague who went through the certification process; and, based upon what he heard, there is front-end enforcement and ongoing enforcement for the MBE program. [#37]
- The non-Hispanic white female owner of a DBE-certified consulting firm stated that it is nice to know the agencies monitor and enforce the programs. [#39a]
- The non-Hispanic white female owner of a DBE-, SBE-, and WBE-certified specialty-contracting firm commented that public agency monitoring and enforcement of the DBE program, specifically the “LCP tracker” [that tracks DBE payments] is “really cool.” [#38]

**Some business owners commented that Caltrans’s monitoring of the programs is unsatisfactory, causes challenges, or is so inactive that they are unaware of monitoring at all.** [e.g., WT#6, #19, #22, #49, #50, #51, #52, #55, #59, #60] For example:

- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm stated, “If [Caltrans and other public agencies] were monitoring and enforcing [the DBE program] the way it should be, then we would have a little higher success ratio in the amount of work we bid versus the amount of work we get. Because these guys are all going to figure out a way to get around it; they always have and they always will.... That way they can just use...the good ol’ boy network....” [#10]
- The Subcontinent Asian American male owner of a DBE-certified transportation services firm reported, “I’m sure they do have something, but it’s not working.” [#54]
- The Black American male owner of a DBE- and SBE-certified contracting firm said that he was aware of the good faith effort as the method for monitoring and enforcement of the DBE program. He added that the contractor “is basically just waiting for the agency PM to say ‘[meeting the goal] is not important, just make the good faith effort.’ They use the promotion of meeting the good faith effort [more] than actually the enforcement of it.” [#61]
- The Black American female owner of a DBE- and SLBE-certified construction-related business reported, “They don’t [do monitoring].... They only say they don’t have enough employees and they don’t have money to do it.... So they

don't go and monitor. They do not do monitoring. They claim they do but they don't." [#48]

- The non-Hispanic white male owner of an SBE-, DVBE-, and SDVOSB-certified consulting firm reported in reference to public agency monitoring and enforcement of its programs, "I haven't seen one piece of evidence that [public agencies] do monitor [DBE and SB/DVBE programs]." He commented, "One time, [agency staff] checked on a project that [a prime] put me down for and I said I have no clue who [the primes] are." [#45a]
- The non-Hispanic white male owner of an SBE-certified consulting company commented that he is aware that his local municipality monitors projects, but he is not sure if there is any enforcement. He added that agencies should find better ways to "quantify how the [subcontracting] goal is being achieved and hold the primes more accountable." [#44]
- The non-Hispanic white male representative of a general contracting firm reported that agencies do not monitor DBEs after they are certified. He said, "It almost seems like the onus of [ensuring DBEs are not fronts] is put on the contractors." He said they do not see it "a lot, but we see it. That is why our program is so strict on our [workers] in the field making sure, they are performing before we claim credit for them. [The] problem is, once we find out they are not [a true DBE] we go to Caltrans and [report the DBE and Caltrans tells us we] have got to claim [the DBE for] credit or be fined." [#26]
- The Hispanic American male representative of a DBE- and SBE-certified woman-owned engineering firm said, "I've never really seen [a public agency] do any monitoring and enforcing." [#23]
- The president of a DBE-, SBE-, and MBE-certified engineering and construction firm said that he has experienced discrimination from public agencies but that the discrimination is "hidden behind unenforced federal DBE requirements and so-called goals." [WT#11]
- The Hispanic American male representative of a DBE- and SBE-certified specialty supply firm expressed that he feels like sometimes the DBE program is not enforced and needs improved monitoring by Caltrans. He said that there are firms doing work that would be difficult for small businesses to do. He commented, "[There are] a couple firms that it seems like...the amount of monies that they've been awarded and the amount of work [that they do]...how do they keep [the DBE] status?" [#11]
- When asked to comment on his firm's experience with public agency monitoring and enforcement of its DBE/SB/DVBE programs, the non-Hispanic white male representative of a general contracting company said, "We do not like anything that is a 'gotcha' moment. We like to have people work alongside of us and say, 'I think we're getting a little bit off the highway

here.” He added, “We try and set up and talk about relationships...so that [agencies] can talk [with us] and we don’t later get a bunch of fines rather than get a phone call saying, ‘You’re getting a little sideways here,’ or whatever it might be, ‘What can I do to help?’” [#41]

**One firm found good faith efforts of primes helpful to securing opportunities.**

- The Hispanic American male representative of a DBE- and SBE-certified specialty supply firm said they find out about some job opportunities “when contractors are sending out the good faith efforts because they’ll list a contract. [We look at the bid items, and] if there is any [materials we supply] we will check it out. [Sometimes we] get new work [from] these good faith efforts....” [#11]

**Some reported experience with or knowledge of false reporting of DBE and SB/DVBE participation or falsifying good faith efforts.** [e.g., WT#7, WT#15, #12, #14, #15, #52, #54, #56]

For example:

- The Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm reported that they had problems with the Los Angeles Department of Water and Power (LADWP) and the City of Los Angeles but did not elaborate on the nature of the problems [with enforcement]. [#3]

The same business owner commented that her firm had good experiences with Los Angeles Metro, specifically in working with a large and well-known prime contractor. She attributes Metro’s success in this area to accountability. [#3]

- The Black American male owner of a DBE- and SBE-certified contracting firm said that the DBE program is no longer helping his firm because prime contractors are abusing the good faith efforts process. He said, “The problem is that the contractors that are getting the jobs have found a way to circumvent using a DBE. They just put out a good-faith goal, send you a fax and say you didn’t respond.” [#61]
- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm stated that eliminating the good faith effort and creating a mandate, “‘This is what it has to be’ is really the way to [make it fair].” [#10]

The same business owner reported that many large prime contractors give the appearance of making good faith efforts but rarely actually employ DBEs. As an example, he said that he had received an email notification regarding “...a huge job and everybody...is sending out all the affidavits and having meetings.... It’s all good faith efforts.... None of these guys will use us...but they canvass everywhere with good faith....” [#10]

- The Black American female owner of a DBE- and SLBE-certified construction-related business reported that she believed her firm was listed on a winning bid but received no work on the project. “I received an e-mail from a Caltrans worker saying that he was EOC and he was contacting me to verify that I have worked on a project. I said, ‘What are you talking about? Send me the information’...and quickly he started changing his mind, ‘Oh, that’s not what I meant. No, I didn’t mean that you were out on the project.’ ‘What did you mean? Because what you said to me implied that this man listed me in this bid and I didn’t get out on the project.’” She added that it seemed that a firm listed her company in its bid but then did not offer any work. [#48]
  
  - The Hispanic American male representative of a DBE- and SBE-certified woman-owned engineering firm when asked about abuse of the good faith efforts process stated, “That I think happens a lot.” He said he receives “tons of faxes,” and many are for work they do not perform. He said, “We’re on the list because we’re a DBE [and] they can look us up, [but] a lot of times it just seems like they just want to have us checked off on the list that they’ve reached [us].” [#23]
  
  - The female owner of a DBE-, WBE-, and SBE-certified consulting firm reported that firms contact her sometimes, inappropriately, to be on their teams. She commented that when she returns the calls from other firms soliciting her for their team, they do not call her back. [PF#5]
- The same business owner said, “...as far as the agency is concerned...as long as they’ve made a phone call, they have satisfied the requirements.... I’m sure that’s not really what the goal of having a DBE is.” [PF#5]
- She added, “...I would hope to see higher DBE goals and more...policing....” [PF#5]
- The male representative of a DBE-, MBE-, and SBE-certified technology-related firm expressed concerns that there is limited feedback and communication from public agencies. In addition, he expressed concerns with barriers that he faces with good faith efforts of larger firms. [PF#6]
  
  - Regarding the good faith efforts process, the non-Hispanic white male owner of an SBE-certified consulting company reported, “We get these phone calls and faxes [from primes performing good faith efforts] all the time.” He said that he is aware that primes need to document that they reached out to firms to document attempts to include certified firms but went on to say that the information the primes provide potential subcontractors many times does not have enough project information for his firm to make a decision to bid. He added that when he contacts the person listed as the point of contact the person either cannot answer technical questions or is never available. He said, “It’s all a game.” [#44]

- The non-Hispanic white female owner of a WBE-, SBE-, and DBE-certified specialty construction firm when asked about abuse of the good faith efforts process reported “90 percent of the jobs I get invited to be for [services her firm does not perform].” She said there are a couple companies that “just write down my name [on good faith efforts documentation]” and do not ever contact her. [#22]
- The non-Hispanic white male representative of a general contracting firm reported that abuse of good faith efforts happens. He said that his firm has lost work to competitors who used a DBE who they know does not perform a commercially useful function. “And yet the low bidder claims that he can use that guy and get credit for it. And we know the guy can’t perform a function, but they get the project.” [#26]
- The Black American male representative of a general contracting firm noted that what constitutes good faith efforts “varies by region.” [#26a]
- Regarding meeting goals and good faith efforts, the Black American female representative of a trade organization said, “...do [firms] continue to look to meet that number, or do they just fill it how....” [PF#3]

The same representative of a trade organization, regarding good faith efforts said, “...I hate that term so much.” [PF#3]

- The Black American male owner of a DBE- and SBE-certified construction-related firm reported that when he first started the business, he would get last minute calls to submit bids. They would say they needed me “to send [a bid] in right away [because they only had a few minutes left]. They got the bid, and they did not even use me for hardly any of the work. [I] helped them get the bid, and then I didn’t really see anything from it.” [#19]
- The non-Hispanic white male owner of an SBE-certified specialty consulting company remarked that prime contractors do not make much effort to satisfy good faith efforts. He stated that prime contractors “just have to show good faith effort that they tried to get somebody. But, you know, they can make up whatever reason they want for the reasons they didn’t get somebody.... I don’t think there’s any real rule other than saying, we made a list. We contacted these people.” [#17]
- The Black American male owner of a DBE- and MBE-certified construction company stated that he was aware of some abuse of good faith efforts. He said, “One thing I resent is a person contacting me for a job a week before it bids. Then they’ll call you and ask you your name and ask are you interested in bidding on the job. Of course your response is no.” [#60]

**Many interviewees reported no knowledge of abuse of good faith efforts.** [e.g., #11, #12, #13, #20, #23, #39a, #41, #42, #45a, #47, #49, #51, #55, #59] For example:

- The non-Hispanic white male owner of a specialty construction firm stated he was not aware of any false DBE reporting or abuse of the “good faith efforts” process. [#37]
- The non-Hispanic white female owner of a DBE-, SBE-, and WBE-certified specialty-contracting firm stated that she does not see any abuse. She replied, “I get a million of those emails [from prime contractors attempting to satisfy good faith efforts requirements], maybe a million and half. They do their diligence. I know all the trade DBEs and I don’t know about other trades but I don’t see monkey business in what they do in my trade.” [#38]

**DBE or SB/DVBE “fronts” or fraud.** Interviewees from a diverse range of experiences and opinions commented on “fronts” or fraud. Some gave first-person accounts of instances they witnessed. [e.g., #56, #61] For example:

- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm reported that there seems to be abuse with DVBE-certified firms. He commented, “They don’t scrutinize them at all. There’s no scrutiny on them whatsoever, they can pretty much do whatever they want to do and not have an issue.... I contacted the State of California Department of General Services about that...because I know the kind of [scrutiny] that I go through as a DBE.” [#10]

The same business owner added that there is a discrepancy with DVBEs. He remarked that there are “DVBEs working on Caltrans jobs and no one scrutinizes the work.... They don’t maintain commercially useful function....” [#10]

- The owner of a WBE-, SWBE-, DBE-, and SBE-certified construction-related firm reported experience with an “unholy increase in the number of firms dominated by men who have assigned 51 percent of the company to their wives/girlfriends to attain WBE status...it’s all legal, but it isn’t fair.” [WT#15]
- The Black American male representative of a general contracting firm said it is a problem when the owner of a “woman-owned small business is not very involved in the business.... We have an extensive program to find out if the DBEs are operating the companies and doing the work themselves and not getting help from someone else. Because we can’t afford to have a DBE that we’re getting credit for that isn’t doing the work.” [#26a]
- The Black American female owner of a DBE- and SLBE-certified construction-related business stated, “...I have heard of how white men are using their wives to certify and [the] wife does not know anything about what’s going on

but he is the day-to-day person...so they are getting contracts because of the wife. It's the woman-owned business." [#48]

- The non-Hispanic white male owner of an engineering firm reported that he has a friend who is in business and gave his wife majority ownership in the company. He said that the company is a "woman-owned business," and the company has received numerous contracts. He added, "I just don't think that is right." He says, "They are married...she knows nothing about the business!" He continued by saying "that goes on all the time...I don't think it's right.... I don't think it's right that they have those preferences in business anymore.... I thought we were past ethnicities!" [#42]
- The Black American male owner of a DBE- and SBE-certified construction-related firm said that there are DBEs who are millionaires who should not be getting contracts. He said, "They should be able to stand [on their own]. If I'm a millionaire, why do I need help?" [#19]

The same business owner reported, "There is a great deal of fraud in the DBE program. There is just fraud everywhere." He said there are "tons" of people who are claiming they are DBEs when they are not. [#19]

- The non-Hispanic white male owner of an SBE-certified consulting company stated that he has no personal knowledge. He, however, noted he has only heard of instances where other firms may be "fronts." [#44]

The same business owner reported that he has heard stories of employees that are "set-up as a certified business to prime jobs...then subcontract back to the old employer." [#44]

- The Subcontinent Asian American male owner of a DBE-certified transportation services firm indicated that he is aware of front firms. He said, "Yeah, there's a company where I think a minority male is involved. I heard he's been in debt for a couple of years and the company is still minority certified, but the guy who owns it is [non-Hispanic white]." He added, "The minority male had a debt...so he gave [the company] to the [non-Hispanic white] guy. The [non-Hispanic white male] began giving him \$5,000 a month. That has happened for ten years now. That is bad. For \$5,000, [the non-Hispanic white male is] getting all the jobs as a [DBE] certified minority firm ...." He remarked, "...it is what it is...nothing you can do.... But now the minority male has died." [#54]

The same business owner continued, "A lot of people do that. They hire somebody.... The [non-Hispanic white] owner recruits blacks or women, where some are homeless; and they don't have a lot of money and they live badly...people getting \$4,000-\$5,000 a month suddenly start living good and start using their name on the company. They have never even been to the office. They're just a nameplate on it." [#54]

- The non-Hispanic white female owner of a DBE-, SBE-, and WBE-certified specialty contracting firm indicated that she is aware of front firms. She explained, “I know one instance right now where there is a firm and the agency has picked up on it. Follow the money, the money is the ticket.” [#38]

**Some business owner reported no knowledge of “fronts” or frauds.** [e.g., #24, #39a, #49]

- The non-Hispanic white male owner of a specialty construction firm stated that he is not aware of any “fronts” or abuse of certification by firms. [#37]

**A number of businesses reported on “pass-throughs.”** A number of businesses provided information on “pass-through” firms that had limited involvement on the job. For example:

- The Hispanic American male representative of a DBE- and SBE-certified specialty supply firm reported, “We buy [the] material, we know the process, [we] take receipt of the material, and we know it’s a cumbersome process.” He said that it is frustrating to lose a contract to another firm when it “just seems like it passes through them...without any work being done.” If they are not “taking possession” of the material and are not adding any value, they should only be getting “a broker percentage” for the value of that item and not the total contract value. “Caltrans needs to do a little better monitoring of that.” [#11]
- The non-Hispanic white male owner of an SBE-certified specialty contracting company said, “[DBE certification is] abused.... I can buy products through somebody else for two or three percent more.... They just pass it through. So they buy what I tell them to buy and mark it up just so that I can say I bought from a disabled veteran, or a minority, woman-owned minority business, whatever.... They’re just a way for somebody else to make an extra few bucks when it’s all said and done.” [#32]

**Any adverse effects of programs on businesses not eligible for the programs.** Some business owners thought there were negative effects. [e.g., WT#6, #43] For example:

- When asked about any negative effects of DBE/SB/DVBE programs on businesses not eligible for the programs, the non-Hispanic white male owner of a specialty construction firm stated that “regular” companies [not certified] might be missing opportunities to get contracts. He went on to say that technically he is a “white guy,” so he could be considered disadvantaged because he’s not a minority or disabled, and is thus excluded from DBE programs. [#37]
- The non-Hispanic white male owner of a specialty construction firm reported that DBE programs provide so much benefit to eligible firms that ineligible firms are then disadvantaged. He said, “I think that sometimes things get to a point where...so I’m the average white guy, and because of that I have status.... I



am not discriminated against.... They are trying to open it up to everybody to be fair, and what have you.... You almost feel like you're a minority." [#18]

- The non-Hispanic white male owner of an SBE-, DVBE-, and SDVOSB-certified consulting firm said, "I think there is a negative effect. Not a direct negative effect, but the fact that other people are getting jobs that they might have." [#45a]
- The Black American male owner of a DBE-, MBE-, and CPUC-certified specialty construction firm said the negative effects for those not eligible for DBE or SB/DVBE certification programs is "they get bumped out of a lot of deal opportunities...just like how we [minorities] got bumped." [#47]
- The non-Hispanic white male owner of an SBE-certified consulting company when asked if his firm has experienced any negative effects from DBE programs because they are not eligible said, "That's happened to us many times...because we are white males." He said that his firm has been in talks with primes and have submitted their SBE certifications. He stated in this instance he was called back and told that his firm's certifications [SBE] were not the certifications approved by the agency, so his firm was no longer under consideration for the work. [#44]
- The non-Hispanic white male owner of an engineering firm said he was not aware of any negative effects of program on businesses not eligible for the program but added, "I think these programs are unfair." [#42]

The same business owner reported that he does not like when he gets inquiries for work and is asked, "Are you a woman-owned or a minority-owned business...because we have to meet a quota percentage." He added, "I don't think that's fair.... I thought we cut those cords a long time ago." [#42]

**Some business owners did not report any adverse effects of programs on businesses not eligible for the program.** [e.g., #11, #13, #14, #38, #39a, #46a, #49, #51, #52, #53, #54, #55, #59, #60]

- The Black American female owner of a DBE- and SLBE-certified construction-related business indicated that there are no negative effects of DBE programs on businesses not eligible for them saying, "Only white people have won the projects...so it doesn't matter." [#48]

**Any MBE/WBE or supplier diversity programs in the local private sector.** Some business owners and representatives reported knowledge or experience with MBE/WBE or supplier diversity programs in the local private sector. [e.g., #42, #48, #52]

**Most interviewees reported no knowledge or experience with local private sector MBE/WBE or supplier diversity programs.** [e.g., #11, #37, #38, #43, #45a, #46a, #47, #49, #53, #54, #59, #60]

## J. DBE and SB/DVBE Certification

Business owners and managers discussed the process for DBE and SB/DVBE certification and other certifications, including comments related to:

- Knowledge of certification opportunities (*page 189*);
- Ease or difficulty of becoming certified (*page 189*);
- Advantages and disadvantages of certification (*page 194*); and
- Experience regarding the certification process and any recommendations for improvement (*page 197*).

**Knowledge of certification opportunities.** Some interviewees discussed their level of understanding about certifications.

**Few reported no awareness, or limited awareness, of certification.** For example, some had no knowledge, while others had questions about certification. [e.g., #42]

**A number of interviewees reported awareness but had not yet certified or qualified as an MBE, WBE, or DBE.** [e.g., #9, #58]

- The Hispanic American male owner of a specialty construction firm said that he is familiar with the DBE program and the DBE designations. He said that if they pursue public-sector work in the future, they might consider DBE certification. He added that in order to qualify or start the DBE certification process, they would have to make changes in their firm. He added that his firm might pursue WBE certification in the future. [#4]

**Some interviewees reported awareness of certification opportunities and noted that learning about certification was relatively easy.** [e.g., #10, #11, #32, #46a] For example:

- The non-Hispanic white male owner of an SBE-, DVBE-, and SDVOSB-certified consulting firm when asked if he has knowledge of any additional certification opportunities noted, “Actually the federal government has an association with the veteran’s firms.” [#45a]
- The Black American male owner of a DBE- and MBE-certified construction company reported that he is aware of certification opportunities. Most of the time it is first-hand knowledge; for other agencies with large projects, he learns of opportunities second-hand. [#60]

**Ease or difficulty of becoming certified.** A number of interviewees commented on how easy or difficult it was to become certified.

**Many interviewees reported difficulties with the DBE or SB/DVBE certification and/or renewal process.** Some interviewees indicated that the certification process was difficult, time consuming or problematic. [e.g., #16, #17, #22] For example:

- When asked about his experience with the DVBE certification process, the non-Hispanic white male owner of a SBE- and DVBE-certified specialty construction firm said, “It was difficult. I had to do just about everything besides give them a blood sample.... It is terrible.... They want bank records and all that crap. Who cares? I am a DVBE. I went to war. Okay?” [#8]

Regarding the renewal process, the same business owner stated that he felt the DVBE renewal process was unnecessary saying, “Who thinks up this stuff? You know, it’s just somebody else in some agency getting paid to justify the

that they really shouldn’t have to...and for a second time because they’ve already done it. Makes no sense.” [#8]

- The non-Hispanic white male owner of an SBE-certified consulting company stated that his experience with SBE certification “wasn’t super easy...but it wasn’t terrible.” [#44]
- The female owner of a DBE-, WBE-, and SBE-certified consulting firm reported that the DBE application process is too lengthy and requires too much information. [PF#5]

The same business owner recommended that there should be a database that all public agencies could share the certification information and prevent repetitive application processes for certification. [PF#5]

- When asked about her experience in becoming WBE-certified and the ease or difficulty associated with the process, the non-Hispanic white female owner of a WBE-certified specialty construction firm described it as very difficult saying, “They wanted every drop of blood out of my body and my firstborn child.” [#7]
- The male representative of a non-certified small woman-owned firm reported that the firm has given up on obtaining 8 (a) certification due to the difficult, time consuming, repetitive and “error-filled” process. [WT#13]
- The Hispanic American female owner of a WBE-, SBE-, and MBE-certified general contracting firm reported, “I guess the easy part of it [certification process] is that they gave me a list of everything that I need to provide to them.” She said, “The complicated part of it is...things that I didn’t know....” She added, “It was definitely very lengthy and very detailed and very specific, so it probably took me a few days to really get everything together.... Once I had everything together and once everything was submitted, the process was pretty smooth. It was just getting everything that they needed, which I felt like I was signing my life away.” [#13]
- The female owner of a WBE-certified transportation firm reported, “It was a difficult process and it still is.” However, she reported that the last

recertification was significantly better. She said, “They’ve improved their system, so it went really smooth this time. This time it was online, which was a significant improvement.” [#34]

The same business owner reported that, in the past, the public utilities certifying agency appeared overwhelmed with too many applications and too few people to process the applications. She commented that they must have increased their staff because the recertification in February 2016 was more efficient. [#34]

She added that her firm had experienced problems with the WBE certification renewal process because the certifying agency was so slow. She said that even though she submitted her renewal application in a timely manner, her certification “expired because they were so behind and didn’t have enough people [to evaluate applications in a timely manner.] It was...a nightmare and it was very nerve wracking for me.... It did cost me money, you know, it was going to hurt me.” [#34]

- The non-Hispanic white female owner of a DBE-certified consulting firm when asked about her experiences becoming certified stated that it was overwhelming. She explained, “...let’s begin with the massive quantity of information that has to be submitted and then should there any change like incorporating, you have to reapply from scratch. They should have a streamlined process.” [#55]

**A number of interviewees reported extended time between applying for and receiving certification or discussed unsuccessful attempts to certify. [e.g., #19] For example:**

- The Hispanic American female owner of a MBE-certified specialty services firm reported that the DBE process of certification was very difficult. She said that she was denied the first time she applied for certification. She said, “I knew the reason why was due to the fact that I’m married to someone in the same industry.” She added that finally she waited a few years, applied again, and received approval. [#5]
- The Subcontinent Asian American female representative of a minority woman-owned DBE-certified supply firm commented, “The experiences were very, very intense. The first time they interviewed us the vice president was here, a tall white male. They took more time listening to him than they were listening to the [minority] female owner, and they actually denied us the first time. And then I think it was six months later that they allowed us to reapply and then they gave it to us.” [#56]
- In discussing her experience with the DBE certification process, the non-Hispanic white female owner of an SBE-certified specialty contracting business reported that she spent more than 70 hours completing her DBE certification application and submitted it to Caltrans a few years ago. She said,

"I was working directly with a [Caltrans] auditor and she went through all the documentation [required] and then she would request more things, which I happily gave." She also received advice from another DBE that had gone through the process because she "had heard how difficult it was to get a DBE designation." She stated that she received a denial letter more than seven months later. She said, "I was devastated because it took so much time for me to put it together and I kept having these dreams of [taking] my company to the next level. Those dreams were dashed." [#24]

The same business owner noted that when the Caltrans representative came to perform the DBE certification site visit, "I wish I would have recorded [the visit]...because when he did his final report a month later or two, he totally forgot a lot of things that we talked about. And he put misleading information." She said, "He lied about some of the things that I said and I actually had a witness with me. [I]n the denial letter, there [were] specific things [that] I didn't say." [#24]

- The non-Hispanic white female owner of an SBE-certified specialty consulting company reported her negative experience when her firm was DBE-decertified. She commented, "...the state decertified us saying [that] because my husband worked here, I didn't know what I was doing [even though I had] a degree...and a license [in the field]." She said she had a hearing and the state "still decertified us.... That was very, very frustrating. [It was] one of the worst days and moments of this company...." [#20]
- The Hispanic American female owner of a WBE-, SBE-, and MBE-certified general contracting firm expressed frustration that she could not obtain DBE certification for the type of work they wished to perform. She said, "It was hard for me...because I didn't qualify under what I was trying to go after.... I didn't qualify because I only had the B license, and the only thing [prime contractors] had for me was private work." She added, "...that was frustrating because I went through this whole process and then I don't qualify...." [#13]

**Some interviewees indicated that a major issue with the certification process is that it is labor intensive and time-consuming; for some, the paperwork was also a barrier.** [e.g., #16, #22, #57, #61] For example:

- The non-Hispanic white male owner of a SBE- and DVBE-certified specialty construction firm reported that despite being registered as a DVBE with Caltrans, his firm is required to file a separate registration with Metrolink: "I am registered with the State [of California], but when it comes to Metrolink, I have to register with them.... Don't they work for the State? Isn't my time, it costs us money, and it does no good because we re already registered." [#8]

- When asked about the ease or difficulty of becoming certified, the Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm said, “It was a process....” He added, “...retrospectively from being in business for six years, it’s a process because if you’re going to be a business in California and do public works projects, you better be accustomed to do a lot of paperwork.... At the time it was like, ‘Holy cow,’ this is crazy, all this information.... It’s just the way it is.” [#10]
- The non-Hispanic white female owner of a DBE-certified consulting firm stated, “It was a headache, very time-consuming. I felt blinded. It was very, very frustrating.” She added, “There’s so much information, you don’t know where to begin. I went to some seminar and [thought they are going] to show me how to do this and give it to me ABCD. They tell you ‘This is what you do.’ Yeah no, it didn’t work that way.” [#39a]
- The Hispanic American male representative of a DBE- and SBE-certified specialty supply firm reported, “The annual certifications can be cumbersome. [They want to see three years of financials, but] if it’s an annual certification, it should be just...the last year’s financials.” [#11]
- The Black American male owner of a DBE-, MBE-, and CPUC-certified specialty construction firm when asked about the ease or difficulty of becoming certified said, “There is nothing easy about any of them [the DBE certifications].” He also stated “some certifications are more difficult than others.... Caltrans’ certification process is purposely over-burdensome because they are trying to weed front firms out.” [#47]

The same business owner reflected on his company’s Caltrans certification experience. He stated that when applying for DBE certification with Caltrans he collaborated with another person with a separate business: “The two businesses were joint venture partners.” He said, “...the lady who reviewed the application and performed the interview was confused and out of her element about the business relationship between the two firms and denied our certification.” He added that, at every level of review, Caltrans’s staff was not able to comprehend his company’s structure. [#47]

- The Black American male owner of a DBE- and SBE-certified construction-related firm said, “It [certification process] was a great deal of paperwork, [but] I think that’s good because there is a lot of fraud out there. It probably could even be more paperwork. [I’ve seen a lot of fraud and thought that] they are not even really scrutinizing people enough.” [#19]
- The Native American male owner of a DBE-certified construction-related firm reported that when he applied for DBE certification, the certification packet he ultimately submitted was about 400 pages. He commented, “[The certifying agency] wanted to have every asset that you have.” [#49]

The same business owner reported that when he first applied for certification as a DBE the reviewer said, “Even though I’m a Native American Indian, I’m probably not viewed as a minority.” He reported that he was able to provide all the required documentation to support his nationality, and his firm ultimately became certified. [#49]

**One interviewee reported a level of unfairness embedded in the certification process.**

- The Black American representative of a minority trade organization suggested that woman-owned companies should not have the same certification as minority owned companies because, in his opinion, they are not as disadvantaged. He said, “I think in construction, making a woman-owned business certifiable [as a DBE], for where my people have been, [woman-owned businesses] shouldn’t have been qualified [the same as] me nor certified [the same as] me.” [#52]

**Some interviewees said that the DBE- or SB/DVBE-certification process was easy, reasonable, or they reported that they received assistance with the process.** [e.g., #2, #14, #28, #38, #45a, #48, #50, #54, #56, #60] For example:

- The non-Hispanic white male owner of an SBE-certified specialty contracting company said that SBE certification “was very easy.” and “Okay. Pretty straight forward.” [#32]
- The non-Hispanic white male owner of an SBE-certified specialty contracting business reported that the SBE certification process was “fairly quick and fairly easy.” [#35]
- The Black American male representative of a minority trade organization commented that “years ago [DBE-certification] was kind of difficult, but now they got people at the agency to assist and expedite certification.” [#52]

**A few interviewees reported that, because they had not gone through the certification process, they did not know whether certification was difficult or not.**

- The non-Hispanic white male owner of a specialty construction firm stated that he is not aware of the ease or difficulty of becoming certified. [#37]

**Advantages and disadvantages of certification.** Interviews included broad discussion of whether and how DBE certification helped subcontractors obtain work from prime contractors.

**Many of the owners and managers of DBE- and SB/DVBE-certified firms indicated that certification is advantageous.** [e.g., #38, #39a, #44, #46a, #47, #51, #52, #54, #55, #57, #61] For example:

- The Hispanic American male representative of a DBE- and SBE-certified specialty supply firm reported that DBE certification sometimes is helpful to

his firm obtaining work. He stated, “A lot of times if the contractor needs to meet the DBE goals, they tend to look for companies with the DBE certification. So sometimes...if your price is right...you will get the work. [#11]

The same business representative commented, “Some contractors are...pretty fair.... If your price is a *little* bit more than the lower guy, typically they’ll still take you [a certified firm] as a supplier....” [#11]

- The Native American male owner of a DBE-certified construction-related firm said that certification “gives the little guy an opportunity to swim with the big ones.” He added, “[Certification] gives us an opportunity to get our foot in the door.” [#49]
- The non-Hispanic white female owner of an SBE-certified specialty contracting business stated that DBE certification is an advantage. She said, “It puts you above the rest. There is lots of competition. If you want to get the work, anything you can do to make yourself stand above the rest, that’s important.” [#24]
- The non-Hispanic white male owner of an SBE-, DVBE-, and SDVOSB-certified consulting firm reported that DVBE-certification has allowed his firm to work on projects they otherwise would not be able to work on commenting, “I do have an opportunity to work on projects that are new to our experience level.” [#45a]
- The Black American male owner of a DBE- and MBE-certified construction company stated, “The big advantages I think are the leads that you normally wouldn’t see come across your desk. In an email, opportunities are sent to you; you just wouldn’t get that without certification.” [#60]

**Some reported advantages specific to working with public agencies.** For example, one interviewee said certification was a platform for working on public-sector jobs.

- The non-Hispanic white female representative of a general contracting company said that minorities and woman-owned businesses gravitate to public-sector work due to goals requirements. She said, “[Being minority- or woman-owned] is an advantage in the sense that you can get agency work.” [#43]

**Some interviews expressed mixed feelings, indicated that there are limited advantages, or even disadvantages, to certification.** [e.g., #22] For example:

- The non-Hispanic white male owner of a SBE- and DVBE-certified specialty construction firm said that the SB/DVBE program does not help his firm get work. He explained, “What the prime contractors do, they go out to an agency

If I would take and bid



those jobs, okay, then I'd never hear from the prime contractors.... They never call you back...and if you do call them to find out [information], you get stupid voice mails." He added, "The human contact between prime contractors' agencies and the actual subcontractors is very, very minimal. That needs to be fixed." [#8]

- The Hispanic American male owner of a DBE- and MBE-certified supply firm remarked, "...certification does no good at all. That's out biggest complaint." [PF#1]

The same business owner added, "...when you're looking at a green product,

- The Black American male owner of a DBE-, MBE-, and CPUC-certified specialty construction firm reported that though there are many advantages, the lack of privacy is the only disadvantage to certification. [#47]
- When asked if there have been any advantages to his firm being certified as an SBE, the non-Hispanic white male owner of an SBE-certified specialty contracting company said, "I don't think so.... The small business doesn't get much of a break, like the disabled veterans would, [or] minority-owned [businesses]. Those get a bigger break. They are more required than [SBEs]. So...[the SBE certification] hasn't been any advantage to us yet." [#32]

**Some businesses suggested that there is a negative stigma associated with being an MBE/WBE or DBE, minority- or woman-owned firm, or small business.** For example:

- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm reported, "The bottom line is, once you fall into that DBE/MBE...category...I think for the general contractors, especially for the bigger primes...[they have the attitude that they] have to have you because [the State is] making [them] use you guys...." [#10]
- The non-Hispanic white female owner of a DBE-certified consulting firm reported that the disadvantage to certification is hearing non-certified firms complain that it is not fair that she is a woman-owned firm. She said, "Hearing some of the guys whine. 'That is not fair. Just because you're a woman.' I think that's humorous." [#55]
- The owner of a DBE- and MBE-certified specialty service firm remarked that certification has been "a block of cement around the neck" of his business. [WT#33]

The same business owner remarked, "[Certification] represents nothing but negative reflections.... I have found no matter how hard I work, no matter how qualified I am, no matter how well positioned my company is; it is all for nothing because the certification of MBE or DBE defines the day." [WT#33]

**Some businesses reported that there is no negative stigma associated with being an MBE/WBE or DBE, minority- or woman-owned firm, or small business.**

- The non-Hispanic white male owner of a specialty construction firm stated that he doesn't think that minority- or woman-owned firms will have problems getting jobs "if they're driven and self-starters, they shouldn't have a challenge...[except] possibly doing the jobs." He spoke about a successful minority, female colleague in the construction industry, who is "all about the work.... She's had to be a woman in a man's world." He went on to say that one thing he really likes about construction is that "if you can do the work, that speaks volumes.... Performance speaks volumes." [#37]

**Several interviewees had additional comments:**

- The non-Hispanic white male owner of a specialty construction firm stated that one advantage of certification is that there is more money because "you're setting yourself apart from illegal aliens." [#37]

The same business owner stated that he is not aware of any disadvantages of certification. [#37]

- The owner of a DBE- and MBE-certified specialty service firm reported that the certification system is corrupt and only benefits a small privileged group of people. He commented that those who benefit from certification are mostly minorities and women that come from well off backgrounds. [WT#33]

The same business owner remarked, "[The] MBE, WBE and DBE program is nothing more than welfare for wealthy minorities and women in business for themselves. We have...eliminated racism in public contracting only to replace it with cronyism. Cronyism is the new form of discrimination." [WT#33]

- The Subcontinent Asian American male owner of a DBE-certified transportation services firm reported, "Yeah, I think the [DBE certification] process should be easier. If you are a woman-owned company or you are DBE, the process should be the same. It shouldn't be any harder to get woman certified." [#54]

**Experience regarding the certification process and any recommendations for improvement.** Interviewees made recommendations for a number of improvements to the certification process.

**Some interviewees recommended a need for simplification of certification and recertification processes.** [e.g., #39a, #46a, #47] For example:

- The non-Hispanic white male owner of a specialty construction firm recommended that Caltrans make the DBE certification process simpler. [#37]

- The non-Hispanic white male representative of an SBE-certified engineering firm said there is too much redundancy in the DBE certification process. He said, “I don’t know who writes these forms, but it’s confusing.” He suggested having a resource to assist with completing the forms for certification — possibly a website or telephone line. He said that the certifying agencies must understand the experience and burden associated with the paperwork. [#28]
- The non-Hispanic white female owner of a WBE-certified specialty construction firm commented, “...let [the time between renewals] go a little bit longer so it doesn’t have to be done so often. Once you’ve been in business and had [the certification] like me, I’ve been here [several decades], not much is going to change.” [#7]
- The non-Hispanic white female owner of an SBE-certified specialty contracting business suggested that there should be a way to “speed up the turnaround time [for DBE certification] and not require so much bureaucracy and paperwork.” [#24]
- The Native American male owner of a DBE-certified construction-related firm reported that the process was “intimidating and time consuming” and recommended simplification of the certification process. [#49]
- The Black American female owner of a construction-related business recommended that the DBE certification approval process be faster. [#2]

**Some had other recommendations, such as a need for more open channels of communication and greater reciprocity among different DBE programs.** For example:

- The non-Hispanic white male owner of an SBE-, DVBE-, and SDVOSB-certified consulting firm recommended that “there should be an opportunity [for subcontractors] to complain [to agencies] about not being treated well by their [prime] contractor.” [#45a]
- Regarding the process and any recommendations for improvement, the Black American female owner of a DBE- and SLBE-certified construction-related business indicated a need for agencies to offer certification reciprocity. She said, “I’m trying to certify with the City of Los Angeles Metro for SPE. They want me to send everything that I have had to send to [the Department of Transportation]. That is ridiculous. If I’m already certified why not just give me reciprocity and call it done.” [#48]
- The Black American male owner of a DBE- and MBE-certified construction company reported having some trouble with the certification process after he was already certified. He said, “A year or so later, all of the sudden I wasn’t a DBE anymore. They got their paperwork screwed up and then they got it straight. A human error mistake.” [#60]

## K. Any Other Insights and Recommendations Concerning Caltrans Contracting or MBE/WBE and DBE Programs

Interviewees provided other suggestions for California state agencies to improve its small business or DVBE and DBE programs, or any other insights or recommendations. Such suggestions and comments are related to:

- What Caltrans is doing well (*page 199*);
- Suggestions for improvement (*page 201*); and
- Final comments (*page 206*).

**What Caltrans is doing well.** Several interviewees spoke about areas where they feel Caltrans is doing well. For instance:

- The non-Hispanic white male owner of a specialty construction firm stated that he is not aware of anything Caltrans is doing well. [#37]
- The non-Hispanic white female owner of a DBE-, SBE-, and WBE-certified specialty-contracting firm reported, “I think they worked well in becoming more open to online submissions. They are one of the few coming into the 21st century.” [#38]
- The Native American male owner of a DVBE-certified transportation firm indicated when asked what Caltrans is doing well, “Well, there are a lot of things they’re doing well. They are getting the contracts out there even though the state of California does not have the money. They are trying to improve which is great. They’re doing a lot of things well.” [#57]
- The Subcontinent Asian American female representative of a minority woman-owned DBE-certified supply firm when asked what Caltrans is doing well replied, “I appreciate their online resources with telling other subcontractors or other suppliers about opportunities. They do a really good job of keeping their website up to date when it comes to certain contracts.” [#56]
- The Subcontinent Asian American owner of a DBE-certified transportation services firm commented, “Their [DBE] program is very good. There is still an opportunity for people like us to work directly for Caltrans and come up in the business. It is good. I like it ....” He stated, “I didn’t have many problems with Caltrans. Usually the problem comes when you give the jobs to some primes. That is when the problem comes in. We have problems with the primes, not with Caltrans.” [#54]
- The Black American male owner of a DBE- and SBE-certified contracting firm when asked what Caltrans is doing well replied, “Caltrans is making a small pool of rich contractors richer.” [#61]

- The non-Hispanic white male representative of a DBE-certified construction-related firm when asked what Caltrans is doing well replied, “They’re being good in spreading the wealth. They are staying up with technology.... They’re more and more accepting of electronic plans as opposed to paper ones. Better but not perfect.” [#53]
- The non-Hispanic white female owner of a DBE-certified consulting firm reported that Caltrans having their contracting opportunities online is something they are doing well. [#55]
- The Black American male representative of a minority trade organization stated, “Caltrans’ online process is something they do well.” [#52]
- The Black American female owner of a construction-related business when asked what Caltrans is doing well reported “everything is very accessible with regard to bidding on projects.” [#2]
- The non-Hispanic white female owner of a DBE-certified consulting firm when asked what Caltrans is doing well replied that they have a lot of work she would like to perform. She added that Caltrans should, “Hire our firm!” [#39a]
- The Black American female owner of a DBE- and SLBE-certified construction-related business said, “The small business statewide committee and the mentor protégé program is a great thing.” [#48]
- Speaking about what works well with Caltrans’s contracting process, the Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm said that her firm likes having online access to payment status which is made available by Caltrans. She added that the Caltrans website is good for understanding things like the types of work required for a project or the challenges a firm might face in meeting compliance requirements. [#3]
- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm stated that the “overall the process does work [but] it could be a lot smoother and it could be more effective.” [#10]
- The non-Hispanic white male representative of a general contracting company stated that Caltrans is doing many things really well. He added, “Caltrans is doing a good job with its DBE program.” [#41]
- The Hispanic American male representative of a DBE- and SBE-certified specialty supply firm reported that Caltrans is doing well in “establishing [goals on] the contracts. That’s always good.” [#11]
- The non-Hispanic white male representative of a general contracting firm when asked what Caltrans is doing well reported that District 4 is “doing a

much better job. I think [they are] trying to bring together DBEs and primes. They have a prime DBE kind of initiative in the Oakland office, which I think has been...positive." [#26]

The same business representative added, "I recently attended training outreached by Caltrans just trying to educate people about [Commercially Useful Function and Good Faith Efforts]. And I thought that was really well done, I think it's kind of putting a more personal touch to the agency." [#26]

- When asked what Caltrans does well, the non-Hispanic white male owner of an engineering firm stated that he believes Caltrans provides a stable work environment to their employees and are very competitive with businesses in the private sectors. He also said that Caltrans has "good people" working for them and are a good employer. [#42]
- The Black American male owner of a DBE- and SBE-certified construction-related firm indicated, "From what I've seen from my experience in dealing with [Caltrans], they've been very professional. They are always looking to help [small businesses] out or answer any questions you got. I have not had any issues with Caltrans at all. They are a great organization. They are good to work for." He said, "I get a ton of information from Caltrans regarding workshops" and other assistance. [#19]
- The non-Hispanic white male owner of a specialty contracting company said, "I think [Caltrans] is keeping up on the infrastructure.... I think they're doing a good job as far as that's going." [#51]
- When asked if there is anything Caltrans is doing well, the Hispanic American male owner of a DBE- and MBE-certified specialty contracting company replied, "Yeah, their online publicizing of opportunities is great. It's a savings from the subscription services...that's fantastic. You know exactly what's going on there." [#46a]
- When asked what Caltrans was doing well, the Black American male owner of a DBE- and MBE-certified construction company responded, "I think Caltrans is doing a good job of putting out the contracts. I think they do a good job of setting the percentages." [#60]

**Suggestions for improvement.** Many respondents provided suggestions for areas Caltrans could improve upon.

**A number of interviewees reported a need for transparency in the bidding processes and unified bid postings.** For example:

- The Black American male representative of a general contracting firm when asked for other suggestions regarding the Caltrans contracting process recommended that Caltrans be more transparent and consistent across

regions. He said, “One region will do something, and we do it the same way in another region and you get a totally different answer.” [#26a]

- The non-Hispanic white male owner of a specialty contracting business recommended that Caltrans “communicate and be honest. [If] I make a bid and I don’t get it, just tell me.” He said he has to hear about losing a bid from someone else before hearing it from Caltrans. [#31]
- The Subcontinent Asian American female representative of a minority woman-owned DBE-certified supply firm suggested that that Caltrans’s contracting and DBE program continue being transparent in what their goals are and what their goals for the primes are. [#56]
- The Native American male owner of a DVBE-certified transportation firm suggested that Caltrans develop an 8A program for DVBEs. “That would be very helpful.” [#57]

The same business owner recommended that Caltrans provide more contracting opportunities to small engineering and architectural firms. He said, “As far as engineering and architectural-wise, [Caltrans] need[s] to get more resources out there for the people because I know of a couple of firms that are trying to get work and they can’t. As far as engineering and architecture, they [Caltrans] keep a lot of their work in house. [#57]

**For some, there is a need for improved dissemination of bidding, outreach, networking, and other assistance.** [e.g., #50] For example:

- The Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm remarked that networking events convey false promises. Small companies are informed “we have so much work for you” but are not informed about the requirements of the work. [#3]
- The non-Hispanic white male owner of an SBE-certified consulting company said, “I’d like to see Caltrans reach out a little more to small businesses.” He continued, “I don’t know what Caltrans does...but there is no advantage to being a small business for Caltrans.... They just reach out to the minority, women or veterans.” [#44]
- The Black American female owner of a construction-related business suggested, “Having programs that help owners who are just getting started, specifically programs directed at Caltrans contractor opportunities.” [#2]
- The Black American male representative of a minority trade organization suggested, “Just don’t restrict [small minority-owned companies]. Build enough numbers of small minority companies and put something in place to build their bottom lines.” [#52]

- The non-Hispanic white male owner of a concrete inspection agency suggested that Caltrans could make information “...more accessible for all potential certifiable firms that include all groups of people, not just women and minorities. Also, information on where small firms can go to get into Caltrans or to get into some kind of public job.” [#59]

**Some DBE-certified business owners had suggestions for Caltrans regarding the behavior of primes regarding their certification.** For example:

- The male owner of a DBE-certified specialty service firm commented that Caltrans should, “...be looking...to make sure whoever’s name is on [the bid]...that they [Caltrans] say they awarded the contract to, should make sure they got the contract....” [PF#10]

The same business owner, regarding unfair bidding practices, commented, “...[prime contractors] use us for the bid and when they get the bids you don’t hear from them anymore.” [PF#10]

- The male owner of a DBE-certified specialty supply firm commented the primes use the same subcontractors repeatedly however “that same person might have bid on that project...using my low bids to get the job...then switching.... There’s nothing that mandates [the prime]...to use the original company that puts in the efforts....” [PF#11]

**Several interviewees recommended other improvements.** Comments include:

- The non-Hispanic white male owner of a SBE- and DVBE-certified specialty construction firm recommended that Caltrans “get rid of the Davis-Bacon. Davis-Bacon doesn’t do anything, any good to anybody except unions that are mediocre.” He asked, “What would be wrong with saying, you know, ‘We’re spending too much money with the union people’...if some guy who’s not a union guy bids at a lower price...[Caltrans should say] ‘We’re Caltrans and we

lower bidder...even if they re not union. [#8]

- The female owner of a DBE-, WBE-, and SBE-certified consulting firm suggested, “Proposal requirements...are so time-consuming and costly...[they should] simplify the proposal process....” [PF#5]
- The non-Hispanic white male representative of a DBE-certified construction-related firm suggested that Caltrans “simplify and streamline quite a few things such as the permitting process; the payment process; and the checks and balances. I’m not trying to do away with them but there’s got to be a simpler way to do it.” [#53]
- The Subcontinent Asian American male owner of a DBE-certified engineering firm stated that the “State...needs to be...paperless.” He believes that having to



submit paperwork wastes a lot of time. He recommends having the ability to submit proposals electronically. [#12]

- The Black American male owner of a DBE- and SBE-certified contracting firm suggested that Caltrans continue the DBE program but have it monitored and enforced as designed. He added, “Just basically, have the DBE program continue, take enforcement from the example set by the federal level.” [#61]
- When asked if she had any suggestions for Caltrans, the non-Hispanic white female owner of a DBE-, SBE-, and WBE-certified specialty contracting firm responded, “...once my work is completed and inspected, pay me.” She added that Caltrans should “make sure their specifications are clean.” [#38]
- The non-Hispanic white female owner of a WBE-, SBE-, and DBE-certified specialty construction firm suggested that it would be helpful if, when an agency has a problem with a prime invoice that has DBE participation, the agency would pay the DBE portion of the invoice so the prime can pay the DBE. “If there was a way [the agency] could go, ‘okay. We’re going to release this amount for them to be paid,’...so the DBEs not sitting there waiting for 90 days.” She said otherwise, “at that point we’ve lost any profit we’re going to [make] because we’re paying interest on whatever we have on material or anything that’s out there.” [#22]

The same business owner added that it would be helpful to split “structural steel away from structural concrete” because the work is different, and it would reduce the amount of faxes she receives for work she does not perform. [#22]

- The non-Hispanic white male owner of an engineering firm stated it would be beneficial to small businesses if Caltrans unbundled more projects into smaller projects. He also said that Caltrans should sponsor more opportunities for small firms to engage with decision makers for projects so that Caltrans can become more familiar with businesses desiring to bid work. [#42]
- The Black American male owner of a DBE- and SBE-certified construction-related firm stated, “There has to be some way to try and...spread the money out [and] not allow [primes] to just use who they have been using for the last 20 years.” [#19]
- The Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm stated that agencies look to Caltrans as the “mother lode” for direction on most issues; however, the agencies choose “cafeteria-style” what guidelines they want to follow for the project. She further remarked that there should be standardized instructions and compliance requirements. [#3]

- The non-Hispanic white male owner of a specialty contracting company, regarding additional measures Caltrans could take to help small businesses, said, “...Caltrans could send out some letters to smaller companies on things that are coming up for bid, whether it be internet, or e-mail. More outreach and noticing of bid opportunities to small businesses.” [#51]
- The non-Hispanic white male owner of an SBE-certified specialty consulting company suggested that there be “more coordination between Caltrans and whoever else [issues certifications] because I know especially in regards to certifications, different agencies have these different qualifications, and I think a lot of them accept the Caltrans qualification, but some of them are their own. Can’t we just have one set of qualifications that everybody uses?” [#17]
- The non-Hispanic white male owner of an SBE-certified specialty consulting company suggested that Caltrans more carefully monitor subcontractors hired by primes. He said that Caltrans will often hire a large union company as the prime contractor and that the prime contractor then hires a union subcontractor, even if that subcontractor is unqualified for a particular job. He added that he blames Caltrans for this because it is their responsibility to ensure the choosing of appropriate subcontractors for a project. [#29]
- The Hispanic American female owner of a DBE-, MBE-, WBE-, and SBE-certified specialty construction firm reported that, as a second- or third-tier subcontractor, Caltrans does not know the depth of a firm’s ability. She added that Caltrans relies on word of mouth to learn about the skills of firms with which they work. [#3]

The same business owner commented that L.A. Metro is willing to talk directly to lower-tiered subcontractors, and agencies like Caltrans need to take more of an interest in learning about the subcontractors. [#3]

- The non-Hispanic white male owner of an SBE-certified specialty contracting company recalled that there used to be a 5 percent bid preference for local vendors. He said, “[You] could be 5 percent higher [on your bid] and still get the job, if you were local.... They don’t do that anymore, [but] it was always convenient. We like that, keep the local work local....” [#32]
- The Black American female owner of a DBE- and SLBE-certified construction-related business said, “[Public agencies] need to have a sensitivity training for the employees and the employees need to understand when partners come in, even if it’s a small business, that they need to be more cognizant of that small business.” [#48]
- When asked if he had any other suggestions for Caltrans contracting, the Black American male owner of a DBE- and MBE-certified construction company responded that he would love to see the ability to obtain a line of credit that could only be used for payroll. He said, “That would help a lot of small

businesses out. They're always going to need help with the funding, just needs to be carefully monitored." [#60]

**Final Comments.** Some provided final comments on the certification processes and race- and gender-based programs. For example:

- When asked if he had any final comments the non-Hispanic white male owner of a SBE- and DVBE-certified specialty construction firm responded, "I've been in construction for 50 years. I love California. I about fell down one time when I looked at the Caltrans budget for one year. Did you know that there was one year that they [Caltrans] increased their budget by 100 percent?" [#8]

The same business owner expressed concern that the Caltrans is not awarding projects to the best companies. He said, "You've got people out here that, that are so knowledgeable and so good at what they do, and I worked with them for years and they do things that were just amazing...and when you look at the people bidding Caltrans work, you look at people who aren't that type of contractor. But they get the work and then you've got to ask, 'Why?'" The interviewee added that Caltrans does not seem to be interested in discovering why the best contractors are not bidding or winning contracts. He said, "And if they did find out why, they probably wouldn't tell the truth. They cannot be

politician to influence people in Caltrans. It's done all the time. [#8]

- The non-Hispanic white male owner of a specialty construction firm said, "It's just like the tax code. It just grows. They don't take away; they just add to it to the point.... I just think that you just [need to] make things simple." [#18]
- Regarding Caltrans' support of small and local businesses, the Subcontinent Asian American female owner of a DBE- and LWBE-certified engineering firm stated, "They have to do better. After all, this is public money, our tax money. The majority of the people that pay taxes are middle-income people, small businesses. If they don't support these businesses, they are not supporting the source of their funding." [#50]

The same business owner added, "We just want the opportunity to work. Otherwise, our talent is really wasted...." [#50]

- The Black American male owner of a DBE-, MBE-, and SBE-certified specialty construction firm remarked, "I'd like to see [Caltrans] really...scrutinize the whole [DBE] process more closely from a dollar standpoint. [If] there's a \$400 million project and you're working on the job and you're doing everything correctly, you have no issues, it's just wrong [and] bad business for the contractor [to stop using you] because you've gotten to your \$9,000 mark that they wrote your name down for [in order] to get rid of you and bring in their buddy." [#10]

- The non-Hispanic white male owner of an SBE-certified specialty contracting reported that Caltrans' use of the metric system makes working with Caltrans difficult. He said, "They do things in metric, but nobody else does metric. So it's a pain. Caltrans is the only agency that does that." [#32]
- The Black American male representative of a minority trade organization recommended, "The CEO at the helm of Caltrans should stop giving all of the contracts and signing off all of the contracts for the firms where former Caltrans staffers work.... That's too obvious, and they've all done it." [#52]
- The non-Hispanic white male owner of an SBE-, DVBE-, and SDVOSB-certified consulting firm suggested the state mandate that primes be subject to a three percent DVBE participation requirement. [#45a]
- When asked if he had any final comments, the non-Hispanic white male representative of a Subcontinent Asian American MBE-certified services provider stated that they would like to work with "the [Santa Clara Valley Transportation Authority and the city of San Jose] because it is a steady income." [#21]
- The Subcontinent Asian American male owner of a MBE-certified professional services firm said, "The main thing is, for [subcontractors], [agencies] need to let the prime release the information to all the subs about potential assignment so [all of the subcontractors] have a shot at getting to do the good work." [#14]

The same business owner suggested, "Cutting down big contracts just for small businesses to compete without the big business...because I guess the playing field is not level." [#14]

- When asked if he had final comments, the non-Hispanic white male owner of an SBE-certified specialty consulting company stated, "I don't pursue public works projects.... I don't care anymore what public works people think." [#29]
- The male owner of a DBE-certified specialty supplier firm faced barriers in securing work when selected by a prime to supply materials. However, Caltrans notified him that they had disqualified his firm. He expressed concerns that his firm is DBE-certified, and Caltrans should not disqualify his firm after the prime won the award. [PF#11]
- The non-Hispanic white female owner of a WBE-certified specialty construction firm suggested that requirements to use union workers prevent her firm from working more on Caltrans projects. She said, "I would like to work on Caltrans projects, but I just was on the understanding you had to be a union, and we're not. And so it's at a disadvantage for us." [#7]

The same business owner added, “Actually, my son-in-law who used to work for me...went to a company...that does do Caltrans [projects], and I’m capable of doing it. I can do it, but I refuse to join a union. I don’t want to be a union and I don’t think anybody should be forced to be union just to work on a certain project....” [#7]

- The non-Hispanic white male representative of an engineering firm commented that they have had a positive experience with Caltrans when they have the opportunity to meet with regional leaders and talk about the scope of our work. He said that having a kickoff meeting improved the overall process, compared to not having a meeting. [#33]
- The Black American male owner of a DBE-, MBE-, and CPUC-certified specialty construction firm suggested that Caltrans establish specification standards that are consistent with material and supplies from the regions where the projects exist. He says changing the specification standards would ultimately provide a cost savings for Caltrans. [#47]
- When asked for final comments, the female representative of a CPUC WBE-certified specialty construction firm responded, “Well, the process that we’ve experienced with [Kern] County has been pretty smooth. [#16]
- The Hispanic American male owner of a non-certified specialty construction company said that he has never before considered getting certified but is now interested in pursuing more information about the process. [#40]
- When asked for final comments, the Hispanic American female owner of a WBE-, SBE-, and MBE-certified general contracting firm explained that her ability to take full advantage of DBE opportunities is limited because of her type of license. She said, “I think if we would have had the right one, we probably would have been more opportunities for us to really go out there and do some work.” [#13]
- When asked if he had any final comments, the Hispanic American male owner of a specialty contracting business stated, “One of the things that would be of benefit for any small business or minority business or whatever status it may be, just small business in general, [would be] if the pay process was streamlined. That would obviously be of great benefit. And [streamlining] the claims process also would be of great benefit, so that doesn’t hinder operating capital for said small businesses.” [#9]
- The non-Hispanic white male representative of a general contracting company said, “Unfortunately, [the construction industry has] recently been experiencing a brain drain.” He said that he is seeing a trend across the industry where many individuals do not want to enter construction. He added that he is seeing many foreign hires that are from all over the world, “so we are dealing with different cultural views.” He went on to say that “we are

accustomed to doing things a certain way and these guys...from where they come from [are different in] how they treat contractors...how they treat negotiations or...how they treat conflict.” He also noted, “This is Caltrans’ challenge right now, and it is not going to get any easier for our industry for the next 15 to 20 years.” [#41]

- In his final comments, the Hispanic American male owner of a DBE- and MBE-certified specialty contracting company suggested that there should be a change with the waiver of subrogation because it has a crippling effect for small businesses. [#46a]
- The Black American male owner of a DBE- and MBE-certified construction company commented that Caltrans should schedule events like forums or seminars at more opportune times to make them more accessible for small businesses that cannot attend during the day. He said, “If I have a contract, I cannot stop my work to attend a day forum or seminar.” He also suggested Caltrans should provide online viewings of meetings so that he could watch what was discussed at a later time as well as provide an email for questions. [#60]

# **APPENDIX E.**

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## **General Approach to Availability Analysis**

# APPENDIX E.

## General Approach to Availability Analysis

The study team used a *custom census* approach to analyze the availability of minority- and woman-owned businesses for transportation-related construction and professional services prime contracts and subcontracts that the California Department of Transportation (Caltrans) and subrecipient local agencies awarded between January 1, 2011 and December 31, 2014 (i.e., the study period). Appendix E expands on the information presented in Chapter 4 to describe the study team's:

- A. General approach to collecting availability information;
- B. Development of the business establishments list;
- C. Development of the survey instrument;
- D. Execution of surveys; and
- E. Additional considerations related to measuring availability.

### A. General Approach to Collecting Availability Information

BBC Research & Consulting (BBC) contracted with Customer Research International (CRI) to conduct telephone surveys with thousands of business establishments in California, which BBC identified as the *relevant geographic market area* for Caltrans contracting. Business establishments that CRI surveyed were businesses with locations in California that the study team identified as doing work in fields closely related to the types of transportation-related contracts that Caltrans and subrecipient local agencies awarded during the study period. The study team began the survey process by determining the subindustries for each relevant Caltrans contract element and identifying 8-digit Dun & Bradstreet (D&B) work specialization codes that best corresponded to those subindustries.<sup>1</sup> The study team then collected information about local 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.<sup>2</sup>

As part of the telephone survey effort, the study team attempted to contact 30,973 business establishments in the local marketplace that do work that is relevant to Caltrans contracting. That total included 24,815 construction establishments; 6,038 professional services

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<sup>1</sup> D&B has developed 8-digit industry codes that provide more precise definitions of business specializations than the 4-digit Standard Industrial Classification (SIC) codes or the North American Industry Classification System (NAICS) codes that the federal government has prepared.

<sup>2</sup> Because D&B organizes its database by *business establishment* and not by “businesses” or “firms,” BBC purchased business listings in that manner. Therefore, in many cases, the study team purchased information about multiple locations of a single business and called all of those locations. BBC’s method for consolidating information for different establishments that were associated with the same business is described later in Appendix E.



establishments; and 120 establishments with a primary line of work that turned out to be outside of the contracting areas relevant to the disparity study (which were not considered further as part of the availability analysis). The study team was able to successfully contact 13,394 of those establishments, or 51 percent of the establishments with valid phone listings. Of business establishments that the study team contacted successfully, 1,852 establishments completed availability surveys.

## **B. Development of the Business Establishments List**

The study team did not expect every business establishment that it contacted to be potentially available for Caltrans work. The study team's goal was to develop—with a high degree of precision—unbiased estimates of the availability of minority- and woman-owned businesses for the types of transportation-related contracts that Caltrans awarded during the study period. In addition, BBC did not design the research effort so that the study team would contact every local business possibly performing construction or professional services work in the local marketplace. To do so would have required the study team to include subindustries that are only marginally related or even unrelated to the types of contracts that Caltrans awarded during the study period. Moreover, some business establishments working in relevant subindustries may have been missing from corresponding D&B or other listings.

BBC determined the types of work involved in Caltrans prime contracts by reviewing prime contract and subcontract dollars that went to different types of businesses during the study period. Figure E-1 lists the 8-digit work specialization codes within construction and professional services that the study team determined were most related to the contract dollars that Caltrans awarded during the study period and that BBC considered as part of the availability analysis. The study team grouped those specializations into distinct subindustries, which are presented as headings in Figure E-1.

## **C. Development of the Survey Instrument**

BBC drafted an availability survey instrument to collect business information from construction and professional services business establishments in California. As an example, the survey instrument that the study team used with construction establishments is presented at the end of Appendix E. The study team modified the construction survey instrument slightly for use with establishments working in the professional services industry in order to reflect terms more commonly used in professional services (e.g., the study team substituted the words “prime contractor” and “subcontractor” with “prime consultant” and “subconsultant” when surveying professional services establishments).<sup>3</sup>

**Survey structure.** The availability survey included 15 sections, and CRI attempted to cover all sections with each business establishment that surveyors successfully contacted and that was willing to complete a survey.

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<sup>3</sup> BBC also developed a fax and e-mail version of the survey instrument for business establishments that reported a preference to complete the survey in those formats.

**Figure E-1.**  
**Subindustries included in the availability analysis**

Industry Code	Industry Description	Industry Code	Industry Description
<b>Construction</b>			
<b>Asphalt and concrete supply</b>		<b>Heavy construction equipment rental</b>	
29510201	Asphalt and asphaltic paving mixtures (not from refineries)	73530000	Heavy construction equipment rental
29510000	Asphalt paving mixtures and blocks	35319908	Road construction and maintenance machinery
52110502	Cement		
32720303	Concrete products, precast, nec	<b>Highway and street construction</b>	
50320100	Paving materials	17710301	Blacktop (asphalt) work
32730000	Ready-mixed concrete	16229901	Bridge construction
		34410201	Bridge sections, prefabricated, highway
<b>Construction sand and gravel</b>		16220000	Bridge, tunnel, and elevated highway construction
14420000	Construction sand and gravel	16110202	Concrete construction: roads, highways, sidewalks, etc.
		17719901	Concrete pumping
<b>Electrical supplies</b>		17719902	Concrete repair
36690203	Pedestrian traffic control equipment	17710000	Concrete work
36690206	Traffic signals, electric	17710201	Curb construction
		17710300	Driveway, parking lot, and blacktop contractors
<b>Electrical work</b>		16119901	General contractor, highway and street construction
17310000	Electrical work	16290000	Heavy construction, nec
		16110000	Highway and street construction
<b>Excavation and drilling</b>		16119902	Highway and street maintenance
17999906	Core drilling and cutting	16110204	Highway and street paving contractor
17940000	Excavation work	16229902	Highway construction, elevated
16110203	Grading	17710303	Parking lot construction
		16299904	Pile driving contractor
<b>Fencing, guardrails and signs</b>		16110205	Resurfacing contractor
17999912	Fence construction	17710202	Sidewalk contractor
16110101	Guardrail construction, highways	16110200	Surfacing and paving
16110102	Highway and street sign installation	16229903	Tunnel construction
16110100	Highway signs and guardrails	16229904	Viaduct construction
<b>Flagging services</b>		<b>Land site prep</b>	
73899921	Flagging service (traffic control)	16299902	Earthmoving contractor
73599912	Work zone traffic equipment (flags, cones, barrels, etc.)	17719904	Foundation and footing contractor
		17410100	Foundation and retaining wall construction
		16290400	Land preparation construction

**Figure E-1.**  
**Subindustries included in the availability analysis (continued)**

Construction (continued)			
<b>Landscape services</b>		<b>Trucking</b>	
07829903	Landscape contractors	42129905	Dump truck haulage
		42120000	Local trucking, without storage
<b>Other construction supplies</b>		<b>Water, sewer, and utility lines</b>	
50399912	Soil erosion control fabrics	16239904	Pipeline construction, nsk
<b>Painting and striping</b>		16230203	Telephone and communication line construction
17210300	Industrial painting	16239906	Underground utilities contractor
17210303	Pavement marking contractor	16230300	Water and sewer line construction
		16230000	Water, sewer, and utility lines
<b>Rebar and reinforcing steel</b>		<b>Wrecking and demolition</b>	
34490101	Bars, concrete reinforcing: fabricated steel	17959901	Concrete Breaking For Streets and Highways
17919902	Concrete reinforcement, placing of	17950000	Wrecking and demolition work
50510209	Forms, concrete construction (steel)		
17910000	Structural steel erection		
Professional Services			
<b>Archeological expeditions</b>		<b>Landscape architecture</b>	
87330201	Archeological expeditions	07810000	Landscape counseling and planning
<b>Construction management</b>		<b>Surveying and mapping</b>	
87419902	Construction management	87130000	Surveying services
<b>Engineering</b>		<b>Testing services</b>	
87110402	Civil engineering	73890200	Inspection and testing services
87110400	Construction and civil engineering		
<b>Environmental research and consulting</b>		<b>Transportation consulting</b>	
87489905	Environmental consultant	87480204	Traffic consultant
89990702	Geophysical consultant	87420410	Transportation consultant

Source: BBC Research & Consulting availability analysis

- 1. Identification of purpose.** The surveys began by identifying Caltrans as the survey sponsor and describing the purpose of the study (e.g., “developing a list of companies interested in construction, maintenance, or design on a wide range of highway and other state or local government transportation-related projects”).
- 2. Verification of correct business name.** The surveyor verified that he or she had reached the correct business, and if not, asked about the correct contact information for the correct business. If the business name was incorrect, surveyors 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 survey instrument at the end of Appendix E).
- 3. Verification of work related to relevant projects.** The surveyor asked whether the organization does work or provides materials related to construction, maintenance, or design (Question A1). Surveyors continued the survey with businesses that responded “yes” to that question.
- 4. Verification of for-profit business status.** The surveyor asked whether the organization was a for-profit business as opposed to a government or nonprofit entity (Question A2). Surveyors continued the survey with businesses that responded “yes” to that question.
- 5. Confirmation of main lines of business.** Businesses confirmed their main lines of business according to D&B (Question A3). If D&B’s work specialization codes were incorrect, businesses then described their main lines of business (Question A4).
- 6. Sole location or multiple locations.** Because the study team surveyed business establishments and not businesses, the surveyor asked business owners or managers if their businesses had other locations (Question A5) and whether their establishments were affiliates or subsidiaries of other businesses (Questions A6, A7, and A8).
- 7. Past bids or work with government agencies and private sector organizations.** The surveyor 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 work.** The surveyor asked about businesses’ qualifications and interest in future work with state or local government agencies in California and with Caltrans. CRI asked those questions in connection with both prime contracts and subcontracts (Questions B9 through B12).
- 9. Geographic areas.** The surveyor asked questions about the geographic regions within California in which businesses serve customers (Questions C1a through C1j).
- 10. Year established.** The surveyor asked businesses to identify the 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 during the past five years. CRI asked those questions for both prime contracts and subcontracts (Questions D2 through D4).

**12. Ownership.** The surveyor asked whether businesses were at least 51 percent owned and controlled by women and minorities (Questions E1 through E3). If businesses indicated that they were minority-owned, they were also asked about the race/ethnicity of their business' ownership. The study team confirmed that information through several other data sources including:

- Caltrans's directory of certified Disadvantaged Business Enterprises (DBEs);
- Caltrans's vendor data;
- Caltrans 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 revenue.** The surveyor asked several questions about the size of businesses in terms of number of employees and revenue. For businesses with multiple locations, the Business Revenue section also asked about their revenues and number of employees across all locations (Questions F1 through F6).

**14. Potential barriers in the marketplace.** The surveyor asked an open-ended question concerning general insights about conditions in the local marketplace (Question G1 and G2). In addition, the survey included a question asking whether respondents would be willing to participate in a follow-up interview about conditions in the local marketplace (Question G3).

**15. Contact information.** The survey concluded with questions about the participant's name and position with the organization (Questions H1 through H6).

## **D. Execution of Surveys**

BBC held planning sessions both in person and via telephone with CRI executives and surveyors prior to conducting the availability surveys. CRI conducted all surveys in 2016. CRI programmed the surveys, conducted them via telephone, and provided BBC with weekly data reports. To minimize non-response, CRI made up to five attempts during different times of the day and on different days of the week to successfully reach each business establishment. CRI attempted to survey a company representative such as the owner, manager, chief financial officer, or other key official who could provide accurate and detailed responses to survey questions.

**Establishments that the study team successfully contacted.** Figure E-2 presents the disposition of the 30,973 business establishments that the study team attempted to contact for availability surveys and how that number resulted in the 13,394 establishments that the study team was able to successfully contact.

**Figure E-2.  
Disposition of  
attempts to survey  
business  
establishments**

Note: CRI made up to five attempts to complete a survey with each establishment.

Source:

BBC Research & Consulting availability analysis.

	Number of firms	Percent of business listings
Beginning list	30,973	
Less duplicate phone numbers	40	
Less non-working phone numbers	3,795	
Less wrong number/business	789	
Unique business listings with working phone numbers	26,349	100.0 %
Less no answer	11,848	45.0
Less could not reach responsible staff member	773	2.9
Less language barrier	334	1.3
<b>Establishments successfully contacted</b>	<b>13,394</b>	<b>50.8 %</b>

**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 (40 listings);
- Non-working phone numbers (3,795 listings); or
- Wrong numbers for the desired businesses (789 listings).

Some non-working phone numbers and wrong numbers resulted from 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 E-2, there were 26,349 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 11,848 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 773 establishments.
- CRI could not conduct the availability survey due to language barriers for 334 establishments.

After taking those unsuccessful attempts into account, CRI was able to successfully contact 13,394 business establishments, or about 51 percent of establishments with valid phone listings.

**Establishments included in the availability database.** Figure E-3 presents the disposition of the 13,394 business establishments that CRI successfully contacted and how that number resulted in the 1,852 businesses that the study team included in the availability database and that the study team considered potentially available for Caltrans work.

**Figure E-3.**  
**Disposition of successfully contacted business establishments**

	Number of Establishments
Establishments successfully contacted	13,394
Less establishments not interested in discussing availability for Caltrans work	5,336
Less unreturned fax/email surveys	756
Establishments that completed interviews about firm characteristics	7,302
Less no relevant work	4,524
Less not a for-profit business	68
Less line of work outside scope	46
Less no past bid/award	624
Less no interest in future work	79
Less established after study period	12
Less multiple establishments	97
<b>Establishments potentially available for entity work</b>	<b>1,852</b>

Source: BBC Research & Consulting availability analysis.

**Establishments not interested in discussing availability for Caltrans work.** Of the 13,394 business establishments that the study team successfully contacted, 5,336 establishments were not interested in discussing their availability for Caltrans work.

**Establishments with unreturned fax/email surveys.** CRI sent hardcopy fax or e-mail availability surveys upon request but did not receive completed surveys from 756 establishments.

**Establishments available for agency work.** In total, 7,302 (55%) successfully-contacted business establishments completed availability surveys. The study team only deemed a portion of those business establishments as available for the prime contracts and subcontracts that Caltrans awarded during the study period. The study team excluded many of the business establishments that completed surveys from the availability database for various reasons:

- BBC excluded 4,524 establishments that indicated that their businesses were not involved in relevant contracting work.
- Of the establishments that completed availability surveys, 68 indicated that they were not a for-profit business. The survey ended when respondents reported that their establishments were not for-profit businesses.
- BBC excluded 46 establishments that indicated that their businesses were involved in construction and professional services but reported that their main lines of business were outside of the study scope.
- BBC excluded 624 establishments that reported not having bid on or been awarded contracts within the past five years.
- BBC excluded 79 establishments that reported not being qualified or interested in either prime contracting or subcontracting opportunities with state or local government agencies in California.

- BBC excluded 12 business establishments that reported being established in 2015 or later. Those business establishments would not have been available for contract elements that Caltrans awarded during the study period.
- Ninety-seven 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, BBC compiled a database of 1,852 businesses that were considered potentially available for Caltrans and other agency 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 different roles of work that establishments of the same business reported (i.e., prime contractor or subcontractor) into a single response 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.
- Except when there were large discrepancies among individual responses regarding establishment dates, BBC used the earliest founding date that establishments of the same business 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 establishments of the same business reported having bid or worked on as the business' relative capacity (i.e., the largest contract for which the business could be considered available).
- BBC considered the largest revenue total that any establishments of the same business reported as the business' revenue cap (for purposes of determining status as a potential DBE).
- 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 woman-owned if the majority of its establishments reported such status.

## **E. Additional Considerations Related to Measuring Availability**

The study team made several additional considerations related to its approach to measuring availability to ensure that estimates of the availability of minority- and woman-owned businesses for Caltrans work were as accurate as possible.



**Not providing a count of all businesses available for Caltrans work.** The purpose of the availability analysis was to provide precise and representative estimates of the percentage of Caltrans contracting dollars for which minority- and woman-owned businesses are available. The availability analysis did not provide a comprehensive listing of every business that could be available for Caltrans work and should not be used in that way. Federal courts have approved BBC's use of that approach to measuring availability. In addition, federal regulations, such as the United States Department of Transportation's (USDOT's) "Tips for Goals Setting in the Disadvantaged Business Enterprise (DBE) Program" recommend similar approaches to measuring availability for agencies implementing minority- and woman-owned owned business programs.<sup>4</sup>

**Not basing the availability analysis on MBE/WBE or DBE directories, prequalification lists, or bidders lists.** Federal guidance, such as USDOT guidance for determining the availability of minority- and woman-owned businesses, recommends dividing the number of businesses in an agency's certification directory by the total number of businesses in the marketplace, as reported in United States Census data. As another option, USDOT suggests using a list of prequalified businesses or a bidders list to estimate the availability of minority- or woman-owned businesses for an agency's prime contracts and subcontracts. The primary reason why the study team rejected such approaches when measuring the availability of minority- and woman-owned businesses for Caltrans work is that dividing a simple count of certified businesses 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 surveys provided data on qualifications, relative capacity, and interest in Caltrans work for each business, which allowed the study team to take a more refined approach to measuring availability. Court cases involving implementations of minority- and woman-owned business programs have approved the use of such approaches to measuring availability.

**Using D&B lists as the sample frame.** BBC began its custom census approach of measuring availability with D&B business lists. D&B does not require businesses to pay a fee to be included in its listings—it is completely free to listed businesses. 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 California:

- 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 survey effort, newly formed businesses are more likely to be minority- or woman-owned, suggesting that minority- and woman-owned businesses might be underrepresented in the final availability database.
- 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

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<sup>4</sup> Tips for Goals Setting in the Disadvantaged Business Enterprise (DBE) Program, <http://www.osdbu.dot.gov/dbeprogram/tips.cfm>.

listings. Small, home-based businesses are more likely than large businesses to be minority- or woman-owned, which again suggests that minority- and woman-owned businesses might be underrepresented in the final availability database.

BBC is not able to quantify the degree to which minority- and woman-owned businesses were underrepresented in the final availability database, if at all. However, estimates presented in the disparity study should be considered conservative estimates of the availability of minority- and woman-owned businesses. Note that 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., North American Industry Classification Codes or D&B industry codes) is a standard step in analyzing businesses in 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 surveyed. For example, it was not possible for BBC to include all businesses possibly doing work in relevant industries without conducting surveys with nearly every business in the relevant geographic market area.

In addition, some industry codes are imprecise and overlap with other business specialties. Some businesses span several types of work, even at the 8-digit level of specificity. That overlap can make classifying businesses 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 businesses in the availability database.

**Non-response bias.** An analysis of non-response bias considers whether businesses that were not successfully surveyed are systematically different from those that were successfully surveyed and included in the final data set. There is potential for non-response bias in any survey effort in which response rate is less than 100 percent. The study team considered the potential for non-response bias due to:

- Research sponsorship;
- Work specializations; and
- Language barriers.

**Research sponsorship.** Surveyors introduced themselves by identifying Caltrans as the survey sponsor, because businesses may be less likely to answer somewhat sensitive business questions if the surveyor was unable to identify the sponsor. In past survey efforts—particularly those related to availability studies—BBC has found that identifying the sponsor substantially increases response rate.

**Work specializations.** Businesses in highly mobile fields, such as trucking, may be more difficult to reach for availability surveys than businesses more likely to work out of fixed offices (e.g., professional services businesses). That assertion suggests that response rates may differ

by work specialization. Simply counting all surveyed businesses across work specializations to estimate the availability of minority- and woman-owned businesses 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 calculating overall availability estimates. Thus, the potential for businesses in highly mobile fields to be less likely to complete a survey is less important, because the study team calculated availability estimates within those fields before combining them in a dollar-weighted fashion with availability estimates from other fields. Work specialization would be a greater source of non-response bias if particular subsets of businesses within a particular field were less likely than other subsets to be easily contacted by telephone.

**Language barriers.** Caltrans 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 surveys in English in the availability analysis. Businesses unable to complete the survey due to language barriers represented less than one percent of contacted businesses.

**Response reliability.** Business owners and managers were asked questions that may be difficult to answer including questions about their revenues. 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 not typically asked to give absolute figures for difficult questions such as revenue and capacity. Rather, they were given ranges of dollar figures. BBC explored the reliability of survey responses in a number of ways. For example:

- BBC reviewed data from the availability surveys in light of information from other sources such as vendor information that the study team collected from Caltrans and other participating agencies. For example, certification databases include data on the race/ethnicity and gender of the owners of DBE-certified businesses. The study team compared survey responses concerning business ownership with that information.
- BBC examined Caltrans contract data to further explore the largest contracts and subcontracts awarded to businesses that participated in the availability surveys. BBC compared survey responses about the largest contracts that businesses won during the past five years with actual Caltrans contract data.
- Caltrans reviewed vendor data that the study team collected and compiled as part of the availability analysis and provided feedback regarding its accuracy.

# Availability Survey Instrument [Construction]

Hello. My name is *[interviewer name]* from Customer Research International. We are calling on behalf of the California Department of Transportation (Caltrans).

This is not a sales call. Caltrans 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 CALTRANS' 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. What is the name of this firm?**

1=VERBATIM

**Y2a. Is *[new firm name]* the same as *[firm name]* doing business under a new name?**

1=Yes, same firm doing business under a different name

2=No, different firm – **SKIP TO Y3**

98=No, does not have information – **TERMINATE**

99=Refused to give information – **TERMINATE**

**Y2b. Was *[firm name]* bought or sold, or did it change ownership?**

1=Yes, company bought/sold/changed ownership

2=No, same ownership

98=No, does not have information – **TERMINATE**

99=Refused to give information – **TERMINATE**

**Y3. Can you give me the complete address or city for [new firm name]?**

*(NOTE TO INTERVIEWER - RECORD IN THE FOLLOWING FORMAT):*

. STREET ADDRESS

. CITY

. STATE

. ZIP

1=VERBATIM

**Y5. Can you give me the name of the owner or manager of [new firm name]?**

*(ENTER UPDATED NAME)*

1=VERBATIM

**Y6. Can I have a telephone number for him/her?**

*(ENTER UPDATED PHONE)*

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, MAINTENANCE 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)*

*(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. 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)

**A4. 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)

**A6. 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**

**A7. What is the name of your parent company?**

1=ENTER NAME

98=(DON'T KNOW)

99=(REFUSED)

**A8. 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 California?**

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/consultant, a subcontractor/consultant, a trucker/hauler, or as a supplier?**

*[MULTIPUNCH]*

1=Prime contractor/consultant

4=Supplier (or manufacturer)

2=Subcontractor/consultant

98=(DON'T KNOW)

3=Trucker/hauler

99=(REFUSED)

**B3. During the past five years, has your company received an award for work on any part of a contract for a state or local government agency in California?**

1=Yes

2=No – **SKIP TO B5**

98=(DON'T KNOW) – **SKIP TO B5**

99=(REFUSED) – **SKIP TO B5**

**B4. Were those awards to work as a prime contractor/consultant, a subcontractor/consultant, a trucker/hauler, or as a supplier?**

[MULTIPUNCH]

1=Prime contractor/consultant

4=Supplier (or manufacturer)

2=Subcontractor/consultant

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 California?**

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/consultant, a subcontractor/consultant, a trucker/hauler, or as a supplier?**

[MULTIPUNCH]

1=Prime contractor/consultant

4=Supplier (or manufacturer)

2=Subcontractor/consultant

98=(DON'T KNOW)

3=Trucker/hauler

99=(REFUSED)

**B7. During the past five years, has your company received an award for work on any part of a contract for a private sector organization in California?**

1=Yes

2=No – SKIP TO B9

98=(DON'T KNOW) – SKIP TO B9

99=(REFUSED) – SKIP TO B9

**B8. Were those awards to work as a prime contractor/consultant, a subcontractor/consultant, a trucker/hauler, or as a supplier?**

[MULTIPUNCH]

1=Prime contractor/consultant

4=Supplier (or manufacturer)

2=Subcontractor/consultant

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 Caltrans as a prime contractor/consultant?**

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 California as a prime contractor?**

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

**B11. Is your company qualified and interested in working with Caltrans as a subcontractor/consultant, 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 California 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 California. 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 North Coast Region, extending from Mendocino through Eureka to the Oregon border?**

*(NOTE TO INTERVIEWER: IF ASKED, THE NORTH COAST AREA IS CALTRANS DISTRICT 1, WHICH INCLUDES DEL NORTE, HUMBOLDT, LAKE, AND MENDOCINO COUNTIES)*

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

**C1b. Could your company do work in the Shasta-Redding Area, extending from Red Bluff through Redding to the Oregon border?**

*(NOTE TO INTERVIEWER: IF ASKED, THE SHASTA-REDDING AREA IS CALTRANS DISTRICT 2, WHICH INCLUDES LASSEN, MODOC, PLUMAS, SHASTA, SISKIYOU, TEHAMA, AND TRINITY COUNTIES)*

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

**C1c. Could your company do work in the Sacramento-Tahoe Region, extending from Sacramento Valley to Lake Tahoe and up to Chico?**

*(NOTE TO INTERVIEWER: IF ASKED, THE SACRAMENTO-TAHOE AREA IS CALTRANS DISTRICT 3, WHICH INCLUDES BUTTE, COLUSA, EL DORADO, GLENN, NEVADA, PLACER, SACRAMENTO, SIERRA, SUTTER, YOLO, AND YUBA COUNTIES)*

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

**C1d. Could your company do work in the San Francisco Bay Area, extending from San Jose to Santa Rosa?**

*(NOTE TO INTERVIEWER: IF ASKED, THE SAN FRANCISCO BAY AREA IS CALTRANS DISTRICT 4, WHICH INCLUDES ALAMEDA, CONTRA COSTA, SONOMA, MARIN, SAN FRANCISCO, SAN MATEO, SANTA CLARA, SOLANO, AND NAPA COUNTIES)*

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

**C1e. Could your company do work in the Central Coast Region, extending from Santa Barbara to Salinas?**

*(NOTE TO INTERVIEWER: IF ASKED, THE CENTRAL COAST REGION IS CALTRANS DISTRICT 5, WHICH INCLUDES MONTEREY, SAN BENITO, SAN LUIS OBISPO, SANTA BARBARA, AND SANTA CRUZ COUNTIES)*

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

**C1f. Could your company do work in the Central Valley, extending from Bakersfield to Stockton?**

*(NOTE TO INTERVIEWER: IF ASKED, THE CENTRAL VALLEY IS CALTRANS DISTRICTS 6 AND 10, WHICH INCLUDE ALPINE, AMADOR, CALAVERAS, FRESNO, KERN, KINGS, MADERA, MARIPOSA, MERCED, SAN JOAQUIN, STANISLAUS, TUOLUMNE, AND TULARE COUNTIES)*

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

**C1g. Could your company do work in the Bishop Region, extending from Bishop to Mono Lake along the Nevada border?**

*(NOTE TO INTERVIEWER: IF ASKED, THE BISHOP AREA IS CALTRANS DISTRICT 9, WHICH INCLUDES INYO AND MONO COUNTIES)*

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

**C1h. Could your company do work in the San Bernardino-Riverside Region, including San Bernardino and Riverside and extending east to Arizona?**

*(NOTE TO INTERVIEWER: IF ASKED, THE SAN BERNARDINO-RIVERSIDE AREA IS CALTRANS DISTRICT 8, WHICH INCLUDES RIVERSIDE AND SAN BERNARDINO COUNTIES)*

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

**C1i. Could your company do work in the Los Angeles Basin, including extending from San Clemente to Ventura and east to Pomona?**

*(NOTE TO INTERVIEWER: IF ASKED, THE LOS ANGELES BASIN IS CALTRANS DISTRICTS 7 AND 12, WHICH INCLUDE LOS ANGELES, VENTURA, AND ORANGE COUNTIES)*

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

**C1j. Could your company do work in the San Diego Region, extending from San Diego and Oceanside east to the Arizona border?**

*(NOTE TO INTERVIEWER: IF ASKED, THE SAN DIEGO AREA IS CALTRANS DISTRICT 11, WHICH INCLUDES SAN DIEGO AND IMPERIAL 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 (1600-2015)

**D2. In rough dollar terms, what was the largest transportation-related contract or subcontract your company was awarded in California 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

2=More than \$100,000 to \$500,000

3=More than \$500,000 to \$1 million

4=More than \$1 million to \$2 million

5=More than \$2 million to \$5 million

6=More than \$5 million to \$10 million

7=More than \$10 million to \$20 million

8=More than \$20 million to \$50 million

9=More than \$50 million to \$100 million

10= More than \$100 million to \$200 million

11=\$200 million or greater

97=(NONE)

98=(DON'T KNOW)

99=(REFUSED)

**D3. Was that the largest transportation-related contract or subcontract that your company bid on or submitted quotes for in California 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 California 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 Black 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 Black American, Asian-Pacific American, Subcontinent Asian American, Hispanic American, or Native American?**

1=Black 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 Commonwealth of the Northern Mariana Islands, Macao, Fiji, Tonga, Kiribati, Tuvalu, 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 over the last three years?**

*(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, over the last three years?**

*(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 over the last three years?**

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, over the last three years? Would you say . . . (READ LIST)**

1=Less than \$1 Million

6=\$16.6 Million - \$18.5 Million

2=\$1 Million - \$4.5 Million

7=\$18.6 Million - \$24 Million

3=\$4.6 Million - \$7 Million

8=\$24.1 Million or more

4=\$7.1 Million - \$12 Million

98= (DON'T KNOW)

5=\$12.1 Million - \$16.5 Million

99= (REFUSED)

**F5. [ONLY IF A5 = 2] About how many employees did you have, on average, for all of your locations over the last three years?**

1=(ENTER RESPONSE)

98=(DON'T KNOW)

99=(REFUSED)

**F6. [ONLY IF A5 = 2] Roughly, what was the average annual gross revenue of your company, for all of your locations over the last three years? Would you say . . . (READ LIST)**

1=Less than \$1 Million

6=\$16.6 Million - \$18.5 Million

2=\$1 Million - \$4.5 Million

7=\$18.6 Million - \$24 Million

3=\$4.6 Million - \$7 Million

8=\$24.1 Million or more

4=\$7.1 Million - \$12 Million

98= (DON'T KNOW)

5=\$12.1 Million - \$16.5 Million

99= (REFUSED)



**G1. We're interested in whether your company has experienced barriers or difficulties in California associated with starting or expanding a business in your industry or with obtaining work. Do you have any thoughts to share on these topics?**

1=VERBATIM (PROBE FOR COMPLETE THOUGHTS)

97=(NOTHING/NONE/NO COMMENTS)

98=(DON'T KNOW)

99=(REFUSED)

**G2. Finally, we're asking for general insights on starting and expanding a business in your industry or winning work in California. 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

2=Owner

3=Manager

4=CFO

5=CEO

6=Assistant to Owner/CEO

7=Sales manager

8=Office manager

9=President

9=(OTHER - SPECIFY)

99=(REFUSED)

**H2. OTHER - SPECIFY**

1=VERBATIM

**H3. For purposes of receiving information from Caltrans, is your mailing address [firm address]:**

1=Yes – **SKIP TO H5**

2=No

98=(DON'T KNOW)

99=(REFUSED)

**H4. What mailing address should they use to get any materials to you?**

1=VERBATIM

**H5. What fax number could they use to fax any materials to you?**

1=NUMERIC (1000000000-9999999999)

**H6. What e-mail address could they use to get any materials to you?**

1=ENTER E-MAIL

97=(NO EMAIL ADDRESS)

98=(DON'T KNOW)

99=(REFUSED)

*(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 Rose Skewis at Caltrans. Ms. Skewis' phone number is (916) 324-8434. Ms. Skewis' email address is [rose.skewis@dot.ca.gov](mailto:rose.skewis@dot.ca.gov).**

# **APPENDIX F.**

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## **Disparity Tables**

**Figure F-2**

**Funding source: Federally and state-funded**

**Agency: Caltrans and local agencies**

**Time period: January 1, 2011 - December 31, 2014**

**Contract area: Construction and professional services**

**Contract role: Prime contractors, subcontractors, and suppliers**

**Region: California**

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All firms	21,667	\$14,419,637	\$15,517,442				
(2) MBE/WBE	7,871	\$2,037,546	\$2,233,731	14.4	19.5	-5.1	73.8
(3) WBE	2,766	\$547,491	\$613,563	4.0	4.9	-1.0	80.0
(4) MBE	5,105	\$1,490,056	\$1,620,168	10.4	14.6	-4.1	71.7
(5) Black American owned	585	\$86,261	\$95,645	0.6	1.6	-0.9	39.4
(6) Asian Pacific American owned	888	\$213,879	\$243,341	1.6	1.5	0.1	105.5
(7) Subcontinent Asian American owned	287	\$77,239	\$82,941	0.5	0.5	0.1	110.6
(8) Hispanic American owned	2,492	\$1,008,655	\$1,099,557	7.1	10.2	-3.1	69.4
(9) Native American owned	769	\$87,013	\$98,684	0.6	0.8	-0.2	77.6
(10) Unknown MBE	84	\$17,008					
(11) DBE-certified	4,925	\$924,989	\$1,024,068	6.6			
(12) Woman-owned DBE	1,446	\$164,460	\$189,146	1.2			
(13) Minority-owned DBE	3,473	\$757,899	\$832,292	5.4			
(14) Black American-owned DBE	454	\$51,943	\$57,925	0.4			
(15) Asian Pacific American-owned DBE	649	\$167,567	\$188,258	1.2			
(16) Subcontinent Asian American-owned DBE	238	\$47,491	\$50,276	0.3			
(17) Hispanic American-owned DBE	1,538	\$430,159	\$469,324	3.0			
(18) Native American-owned DBE	582	\$60,183	\$66,510	0.4			
(19) Unknown DBE-MBE	12	\$555					
(20) White male-owned DBE	6	\$2,630	\$2,630	0.0			

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

\*Unknown minority-owned businesses and unknown DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 5) accounted for 25 percent of total minority-owned business 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. Additionally, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

**Figure F-3**

**Funding source: Federally and state-funded**

**Agency: Caltrans and local agencies**

**Time period: January 1, 2011 - December 31, 2014**

**Contract area: Construction**

**Contract role: Prime contractors, subcontractors, and suppliers**

**Region: California**

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All firms	16,831	\$11,070,699	\$11,880,009				
(2) MBE/WBE	6,124	\$1,514,751	\$1,656,023	13.9	18.1	-4.1	77.1
(3) WBE	2,130	\$407,361	\$456,772	3.8	4.3	-0.5	88.7
(4) MBE	3,994	\$1,107,390	\$1,199,251	10.1	13.7	-3.7	73.4
(5) Black American owned	482	\$68,451	\$74,627	0.6	1.3	-0.6	50.1
(6) Asian Pacific American owned	580	\$124,831	\$142,116	1.2	1.1	0.1	108.8
(7) Subcontinent Asian American owned	202	\$38,746	\$40,404	0.3	0.3	0.0	101.8
(8) Hispanic American owned	2,030	\$796,638	\$859,762	7.2	10.2	-2.9	71.2
(9) Native American owned	651	\$74,194	\$82,342	0.7	0.9	-0.2	77.6
(10) Unknown MBE	49	\$4,529					
(11) DBE-certified	3,806	\$652,950	\$719,684	6.1			
(12) Woman-owned DBE	1,087	\$110,262	\$127,482	1.1			
(13) Minority-owned DBE	2,719	\$542,687	\$592,203	5.0			
(14) Black American-owned DBE	374	\$44,697	\$49,865	0.4			
(15) Asian Pacific American-owned DBE	432	\$106,265	\$120,256	1.0			
(16) Subcontinent Asian American-owned DBE	172	\$25,804	\$26,174	0.2			
(17) Hispanic American-owned DBE	1,241	\$315,069	\$340,570	2.9			
(18) Native American-owned DBE	496	\$50,445	\$55,337	0.5			
(19) Unknown DBE-MBE	4	\$408					
(20) White male-owned DBE	0	\$0	\$0	0.0			

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

\*Unknown minority-owned businesses and unknown DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 5) accounted for 25 percent of total minority-owned business 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. Additionally, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

**Figure F-4**

**Funding source: Federally and state-funded**

**Agency: Caltrans and local agencies**

**Time period: January 1, 2011 - December 31, 2014**

**Contract area: Professional services**

**Contract role: Prime contractors, subcontractors, and suppliers**

**Region: California**

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All firms	4,836	\$3,348,938	\$3,637,433				
(2) MBE/WBE	1,747	\$522,796	\$577,708	15.9	24.2	-8.3	65.8
(3) WBE	636	\$140,130	\$156,791	4.3	6.9	-2.6	62.3
(4) MBE	1,111	\$382,666	\$420,917	11.6	17.2	-5.7	67.1
(5) Black American owned	103	\$17,810	\$20,915	0.6	2.6	-2.0	22.3
(6) Asian Pacific American owned	308	\$89,048	\$102,243	2.8	2.8	0.1	102.1
(7) Subcontinent Asian American owned	85	\$38,493	\$43,099	1.2	1.0	0.2	122.2
(8) Hispanic American owned	462	\$212,017	\$238,566	6.6	10.4	-3.8	63.3
(9) Native American owned	118	\$12,819	\$16,094	0.4	0.6	-0.1	76.4
(10) Unknown MBE	35	\$12,479					
(11) DBE-certified	1,119	\$272,039	\$304,384	8.4			
(12) Woman-owned DBE	359	\$54,197	\$61,664	1.7			
(13) Minority-owned DBE	754	\$215,212	\$240,089	6.6			
(14) Black American-owned DBE	80	\$7,247	\$8,053	0.2			
(15) Asian Pacific American-owned DBE	217	\$61,302	\$68,011	1.9			
(16) Subcontinent Asian American-owned DBE	66	\$21,687	\$24,109	0.7			
(17) Hispanic American-owned DBE	297	\$115,090	\$128,749	3.5			
(18) Native American-owned DBE	86	\$9,738	\$11,167	0.3			
(19) Unknown DBE-MBE	8	\$147					
(20) White male-owned DBE	6	\$2,630	\$2,630	0.1			

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

\*Unknown minority-owned businesses and unknown DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 5) accounted for 25 percent of total minority-owned business 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. Additionally, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-5

Funding source: State

Agency: Caltrans and local agencies

Time period: January 1, 2011 - December 31, 2014

Contract area: Construction and professional services

Contract role: Prime contractors, subcontractors, and suppliers

Region: California

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All firms	7,064	\$3,880,370	\$3,894,155				
(2) MBE/WBE	1,694	\$513,578	\$519,461	13.3	19.2	-5.9	69.5
(3) WBE	489	\$126,268	\$127,196	3.3	5.1	-1.8	64.5
(4) MBE	1,205	\$387,309	\$392,265	10.1	14.1	-4.1	71.3
(5) Black American owned	162	\$13,611	\$13,855	0.4	1.1	-0.8	31.1
(6) Asian Pacific American owned	200	\$34,469	\$35,829	0.9	1.3	-0.4	71.8
(7) Subcontinent Asian American owned	105	\$24,964	\$25,372	0.7	0.4	0.2	153.2
(8) Hispanic American owned	586	\$288,016	\$296,759	7.6	10.4	-2.8	73.2
(9) Native American owned	120	\$19,929	\$20,450	0.5	0.9	-0.3	60.7
(10) Unknown MBE	32	\$6,321					
(11) DBE-certified	815	\$165,769	\$167,560	4.3			
(12) Woman-owned DBE	155	\$19,772	\$19,947	0.5			
(13) Minority-owned DBE	655	\$143,507	\$145,122	3.7			
(14) Black American-owned DBE	119	\$7,092	\$7,112	0.2			
(15) Asian Pacific American-owned DBE	89	\$19,085	\$19,868	0.5			
(16) Subcontinent Asian American-owned DBE	85	\$17,777	\$17,777	0.5			
(17) Hispanic American-owned DBE	282	\$93,612	\$94,233	2.4			
(18) Native American-owned DBE	80	\$5,940	\$6,132	0.2			
(19) Unknown DBE-MBE	0	\$0					
(20) White male-owned DBE	5	\$2,490	\$2,490	0.1			

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

\*Unknown minority-owned businesses and unknown DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 5) accounted for 25 percent of total minority-owned business 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. Additionally, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-6

Funding source: State

Agency: Caltrans and local agencies

Time period: January 1, 2011 - December 31, 2014

Contract area: Construction

Contract role: Prime contractors, subcontractors, and suppliers

Region: California

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All firms	5,775	\$3,108,805	\$3,122,590				
(2) MBE/WBE	1,383	\$418,704	\$424,587	13.6	18.9	-5.3	71.9
(3) WBE	381	\$94,026	\$94,953	3.0	4.9	-1.8	62.5
(4) MBE	1,002	\$324,678	\$329,633	10.6	14.0	-3.5	75.2
(5) Black American owned	133	\$11,628	\$11,704	0.4	1.0	-0.6	38.7
(6) Asian Pacific American owned	148	\$18,223	\$19,097	0.6	0.9	-0.3	64.6
(7) Subcontinent Asian American owned	93	\$22,676	\$22,784	0.7	0.3	0.4	200+
(8) Hispanic American owned	509	\$251,183	\$256,363	8.2	10.8	-2.6	75.9
(9) Native American owned	102	\$19,400	\$19,684	0.6	1.0	-0.3	64.7
(10) Unknown MBE	17	\$1,568					
(11) DBE-certified	659	\$135,794	\$137,584	4.4			
(12) Woman-owned DBE	113	\$12,658	\$12,832	0.4			
(13) Minority-owned DBE	546	\$123,136	\$124,752	4.0			
(14) Black American-owned DBE	96	\$6,066	\$6,086	0.2			
(15) Asian Pacific American-owned DBE	67	\$12,371	\$13,154	0.4			
(16) Subcontinent Asian American-owned DBE	74	\$16,139	\$16,139	0.5			
(17) Hispanic American-owned DBE	239	\$82,787	\$83,408	2.7			
(18) Native American-owned DBE	70	\$5,774	\$5,965	0.2			
(19) Unknown DBE-MBE	0	\$0					
(20) White male-owned DBE	0	\$0	\$0	0.0			

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

\*Unknown minority-owned businesses and unknown DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 5) accounted for 25 percent of total minority-owned business 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. Additionally, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.



Figure F-7

Funding source: State

Agency: Caltrans and local agencies

Time period: January 1, 2011 - December 31, 2014

Contract area: Professional services

Contract role: Prime contractors, subcontractors, and suppliers

Region: California

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All firms	1,289	\$771,565	\$771,565				
(2) MBE/WBE	311	\$94,874	\$94,874	12.3	20.3	-8.0	60.5
(3) WBE	108	\$32,243	\$32,243	4.2	5.9	-1.7	71.1
(4) MBE	203	\$62,632	\$62,632	8.1	14.5	-6.3	56.1
(5) Black American owned	29	\$1,983	\$2,146	0.3	1.8	-1.6	15.0
(6) Asian Pacific American owned	52	\$16,245	\$17,580	2.3	2.6	-0.4	86.6
(7) Subcontinent Asian American owned	12	\$2,288	\$2,476	0.3	0.7	-0.4	43.0
(8) Hispanic American owned	77	\$36,832	\$39,857	5.2	8.8	-3.6	58.7
(9) Native American owned	18	\$530	\$573	0.1	0.4	-0.4	17.4
(10) Unknown MBE	15	\$4,753					
(11) DBE-certified	156	\$29,975	\$29,975	3.9			
(12) Woman-owned DBE	42	\$7,115	\$7,115	0.9			
(13) Minority-owned DBE	109	\$20,370	\$20,370	2.6			
(14) Black American-owned DBE	23	\$1,026	\$1,026	0.1			
(15) Asian Pacific American-owned DBE	22	\$6,714	\$6,714	0.9			
(16) Subcontinent Asian American-owned DBE	11	\$1,638	\$1,638	0.2			
(17) Hispanic American-owned DBE	43	\$10,826	\$10,826	1.4			
(18) Native American-owned DBE	10	\$167	\$167	0.0			
(19) Unknown DBE-MBE	0	\$0					
(20) White male-owned DBE	5	\$2,490	\$2,490	0.3			

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

\*Unknown minority-owned businesses and unknown DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 5) accounted for 25 percent of total minority-owned business 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. Additionally, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

**Figure F-8**

**Funding source:** Federal

**Agency:** Caltrans and local agencies

**Time period:** January 1, 2011 - December 31, 2014

**Contract area:** Construction and professional services

**Contract role:** Prime contractors, subcontractors, and suppliers

**Region:** California

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All firms	14,603	\$10,539,267	\$11,623,288				
(2) MBE/WBE	6,177	\$1,523,969	\$1,714,270	14.7	19.6	-4.9	75.2
(3) WBE	2,277	\$421,222	\$486,367	4.2	4.9	-0.7	85.4
(4) MBE	3,900	\$1,102,747	\$1,227,904	10.6	14.7	-4.1	71.8
(5) Black American owned	423	\$72,651	\$81,727	0.7	1.7	-1.0	41.3
(6) Asian Pacific American owned	688	\$179,411	\$207,356	1.8	1.6	0.2	114.6
(7) Subcontinent Asian American owned	182	\$52,275	\$57,605	0.5	0.5	0.0	98.6
(8) Hispanic American owned	1,906	\$720,639	\$803,005	6.9	10.1	-3.2	68.1
(9) Native American owned	649	\$67,084	\$78,211	0.7	0.8	-0.1	83.6
(10) Unknown MBE	52	\$10,687					
(11) DBE-certified	4,110	\$759,219	\$856,508	7.4			
(12) Woman-owned DBE	1,291	\$144,687	\$169,199	1.5			
(13) Minority-owned DBE	2,818	\$614,392	\$687,170	5.9			
(14) Black American-owned DBE	335	\$44,852	\$50,816	0.4			
(15) Asian Pacific American-owned DBE	560	\$148,482	\$168,404	1.4			
(16) Subcontinent Asian American-owned DBE	153	\$29,714	\$32,490	0.3			
(17) Hispanic American-owned DBE	1,256	\$336,547	\$375,077	3.2			
(18) Native American-owned DBE	502	\$54,243	\$60,384	0.5			
(19) Unknown DBE-MBE	12	\$555					
(20) White male-owned DBE	1	\$140	\$140	0.0			

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

\*Unknown minority-owned businesses and unknown DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 5) accounted for 25 percent of total minority-owned business 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. Additionally, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

**Figure F-9**

**Funding source: Federal**

**Agency: Caltrans and local agencies**

**Time period: January 1, 2011 - December 31, 2014**

**Contract area: Construction**

**Contract role: Prime contractors, subcontractors, and suppliers**

**Region: California**

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All firms	11,056	\$7,961,894	\$8,757,419				
(2) MBE/WBE	4,741	\$1,096,047	\$1,231,437	14.1	17.8	-3.7	79.1
(3) WBE	1,749	\$313,335	\$361,819	4.1	4.1	0.0	99.6
(4) MBE	2,992	\$782,712	\$869,618	9.9	13.6	-3.7	72.8
(5) Black American owned	349	\$56,823	\$62,917	0.7	1.4	-0.6	53.0
(6) Asian Pacific American owned	432	\$106,608	\$123,006	1.4	1.2	0.3	121.8
(7) Subcontinent Asian American owned	109	\$16,070	\$17,628	0.2	0.3	-0.1	61.0
(8) Hispanic American owned	1,521	\$545,454	\$603,412	6.9	9.9	-3.0	69.4
(9) Native American owned	549	\$54,795	\$62,655	0.7	0.9	-0.1	82.7
(10) Unknown MBE	32	\$2,962					
(11) DBE-certified	3,147	\$517,156	\$582,100	6.6			
(12) Woman-owned DBE	974	\$97,605	\$114,649	1.3			
(13) Minority-owned DBE	2,173	\$419,551	\$467,451	5.3			
(14) Black American-owned DBE	278	\$38,631	\$43,783	0.5			
(15) Asian Pacific American-owned DBE	365	\$93,894	\$107,113	1.2			
(16) Subcontinent Asian American-owned DBE	98	\$9,665	\$10,026	0.1			
(17) Hispanic American-owned DBE	1,002	\$232,282	\$257,152	2.9			
(18) Native American-owned DBE	426	\$44,671	\$49,377	0.6			
(19) Unknown DBE-MBE	4	\$408					
(20) White male-owned DBE	0	\$0	\$0	0.0			

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

\*Unknown minority-owned businesses and unknown DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 5) accounted for 25 percent of total minority-owned business 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. Additionally, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

**Figure F-10**

**Funding source: Federal**

**Agency: Caltrans and local agencies**

**Time period: January 1, 2011 - December 31, 2014**

**Contract area: Professional services**

**Contract role: Prime contractors, subcontractors, and suppliers**

**Region: California**

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All firms	3,547	\$2,577,374	\$2,865,868				
(2) MBE/WBE	1,436	\$427,922	\$482,833	16.8	25.2	-8.3	66.9
(3) WBE	528	\$107,887	\$124,548	4.3	7.2	-2.9	60.3
(4) MBE	908	\$320,035	\$358,286	12.5	18.0	-5.5	69.5
(5) Black American owned	74	\$15,827	\$18,716	0.7	2.8	-2.1	23.6
(6) Asian Pacific American owned	256	\$72,802	\$84,793	3.0	2.8	0.2	106.2
(7) Subcontinent Asian American owned	73	\$36,205	\$40,408	1.4	1.0	0.4	137.0
(8) Hispanic American owned	385	\$175,185	\$198,948	6.9	10.8	-3.8	64.4
(9) Native American owned	100	\$12,289	\$15,421	0.5	0.6	-0.1	86.7
(10) Unknown MBE	20	\$7,725					
(11) DBE-certified	963	\$242,064	\$274,408	9.6			
(12) Woman-owned DBE	317	\$47,082	\$54,549	1.9			
(13) Minority-owned DBE	645	\$194,841	\$219,719	7.7			
(14) Black American-owned DBE	57	\$6,221	\$7,027	0.2			
(15) Asian Pacific American-owned DBE	195	\$54,588	\$61,296	2.1			
(16) Subcontinent Asian American-owned DBE	55	\$20,049	\$22,471	0.8			
(17) Hispanic American-owned DBE	254	\$104,264	\$117,923	4.1			
(18) Native American-owned DBE	76	\$9,572	\$11,002	0.4			
(19) Unknown DBE-MBE	8	\$147					
(20) White male-owned DBE	1	\$140	\$140	0.0			

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

\*Unknown minority-owned businesses and unknown DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 5) accounted for 25 percent of total minority-owned business 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. Additionally, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

**Figure F-11**

**Funding source: Federally and state-funded**

**Agency: Caltrans and local agencies**

**Time period: January 1, 2011 - December 31, 2012**

**Contract area: Construction and professional services**

**Contract role: Prime contractors, subcontractors, and suppliers**

**Region: California**

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All firms	11,940	\$9,138,685	\$9,738,207				
(2) MBE/WBE	4,302	\$1,088,670	\$1,174,568	12.1	18.1	-6.0	66.8
(3) WBE	1,564	\$262,788	\$289,916	3.0	4.4	-1.4	68.4
(4) MBE	2,738	\$825,882	\$884,652	9.1	13.7	-4.6	66.3
(5) Black American owned	380	\$58,795	\$64,112	0.7	1.4	-0.7	46.9
(6) Asian Pacific American owned	474	\$117,845	\$134,444	1.4	1.4	0.0	98.2
(7) Subcontinent Asian American owned	152	\$42,351	\$44,928	0.5	0.4	0.0	105.2
(8) Hispanic American owned	1,249	\$559,204	\$593,668	6.1	9.7	-3.6	62.7
(9) Native American owned	432	\$42,901	\$47,500	0.5	0.7	-0.2	66.7
(10) Unknown MBE	51	\$4,787					
(11) DBE-certified	2,258	\$439,795	\$475,573	4.9			
(12) Woman-owned DBE	638	\$80,629	\$89,837	0.9			
(13) Minority-owned DBE	1,620	\$359,166	\$385,736	4.0			
(14) Black American-owned DBE	296	\$36,575	\$40,348	0.4			
(15) Asian Pacific American-owned DBE	302	\$77,969	\$88,563	0.9			
(16) Subcontinent Asian American-owned DBE	117	\$20,038	\$20,781	0.2			
(17) Hispanic American-owned DBE	626	\$195,520	\$205,663	2.1			
(18) Native American-owned DBE	273	\$28,906	\$30,381	0.3			
(19) Unknown DBE-MBE	6	\$158					
(20) White male-owned DBE	0	\$0	\$0	0.0			

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

\*Unknown minority-owned businesses and unknown DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 5) accounted for 25 percent of total minority-owned business 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. Additionally, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

**Figure F-12**

**Funding source: Federally and state-funded**

**Agency: Caltrans and local agencies**

**Time period: January 1, 2013 - December 31, 2014**

**Contract area: Construction and professional services**

**Contract role: Prime contractors, subcontractors, and suppliers**

**Region: California**

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All firms	9,727	\$5,280,953	\$5,779,235				
(2) MBE/WBE	3,569	\$948,876	\$1,059,163	18.3	21.9	-3.6	83.5
(3) WBE	1,202	\$284,703	\$323,647	5.6	5.9	-0.3	94.4
(4) MBE	2,367	\$664,174	\$735,516	12.7	16.0	-3.3	79.5
(5) Black American owned	205	\$27,466	\$31,405	0.5	1.8	-1.3	29.6
(6) Asian Pacific American owned	414	\$96,035	\$108,881	1.9	1.6	0.3	116.0
(7) Subcontinent Asian American owned	135	\$34,888	\$38,017	0.7	0.6	0.1	117.9
(8) Hispanic American owned	1,243	\$449,451	\$505,961	8.8	11.0	-2.3	79.4
(9) Native American owned	337	\$44,113	\$51,253	0.9	1.0	-0.1	91.6
(10) Unknown MBE	33	\$12,221					
(11) DBE-certified	2,667	\$485,194	\$548,495	9.5			
(12) Woman-owned DBE	808	\$83,831	\$99,309	1.7			
(13) Minority-owned DBE	1,853	\$398,733	\$446,556	7.7			
(14) Black American-owned DBE	158	\$15,368	\$17,577	0.3			
(15) Asian Pacific American-owned DBE	347	\$89,599	\$99,694	1.7			
(16) Subcontinent Asian American-owned DBE	121	\$27,453	\$29,496	0.5			
(17) Hispanic American-owned DBE	912	\$234,639	\$263,661	4.6			
(18) Native American-owned DBE	309	\$31,277	\$36,129	0.6			
(19) Unknown DBE-MBE	6	\$397					
(20) White male-owned DBE	6	\$2,630	\$2,630	0.0			

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

\*Unknown minority-owned businesses and unknown DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 5) accounted for 25 percent of total minority-owned business 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. Additionally, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

**Figure F-13**

**Funding source: Federal**

**Agency: Caltrans and local agencies**

**Time period: January 1, 2011 - December 31, 2012**

**Contract area: Construction and professional services**

**Contract role: Prime contractors, subcontractors, and suppliers**

**Region: California**

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All firms	7,891	\$6,314,387	\$6,906,547				
(2) MBE/WBE	3,353	\$811,367	\$892,311	12.9	18.3	-5.4	70.4
(3) WBE	1,291	\$217,728	\$244,046	3.5	4.4	-0.9	80.1
(4) MBE	2,062	\$593,639	\$648,265	9.4	13.9	-4.5	67.4
(5) Black American owned	282	\$51,893	\$57,056	0.8	1.6	-0.8	52.4
(6) Asian Pacific American owned	368	\$99,018	\$114,729	1.7	1.5	0.1	108.0
(7) Subcontinent Asian American owned	93	\$28,401	\$30,843	0.4	0.5	0.0	91.1
(8) Hispanic American owned	926	\$376,252	\$405,384	5.9	9.6	-3.8	60.9
(9) Native American owned	359	\$35,761	\$40,253	0.6	0.7	-0.1	84.9
(10) Unknown MBE	34	\$2,314					
(11) DBE-certified	1,850	\$359,171	\$393,929	5.7			
(12) Woman-owned DBE	580	\$72,890	\$82,041	1.2			
(13) Minority-owned DBE	1,270	\$286,281	\$311,887	4.5			
(14) Black American-owned DBE	218	\$30,968	\$34,722	0.5			
(15) Asian Pacific American-owned DBE	255	\$68,950	\$78,965	1.1			
(16) Subcontinent Asian American-owned DBE	68	\$9,261	\$9,996	0.1			
(17) Hispanic American-owned DBE	493	\$152,099	\$161,882	2.3			
(18) Native American-owned DBE	230	\$24,846	\$26,322	0.4			
(19) Unknown DBE-MBE	6	\$158					
(20) White male-owned DBE	0	\$0	\$0	0.0			

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

\*Unknown minority-owned businesses and unknown DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 5) accounted for 25 percent of total minority-owned business 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. Additionally, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

**Figure F-14**

**Funding source:** Federal

**Agency:** Caltrans and local agencies

**Time period:** January 1, 2013 - December 31, 2014

**Contract area:** Construction and professional services

**Contract role:** Prime contractors, subcontractors, and suppliers

**Region:** California

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All firms	6,712	\$4,224,880	\$4,716,740				
(2) MBE/WBE	2,824	\$712,602	\$821,959	17.4	21.5	-4.0	81.2
(3) WBE	986	\$203,494	\$242,321	5.1	5.6	-0.5	91.5
(4) MBE	1,838	\$509,108	\$579,639	12.3	15.8	-3.6	77.6
(5) Black American owned	141	\$20,758	\$24,529	0.5	1.9	-1.4	27.5
(6) Asian Pacific American owned	320	\$80,392	\$92,574	2.0	1.6	0.4	124.1
(7) Subcontinent Asian American owned	89	\$23,875	\$26,757	0.6	0.5	0.0	109.0
(8) Hispanic American owned	980	\$344,387	\$397,810	8.4	10.9	-2.4	77.6
(9) Native American owned	290	\$31,323	\$37,969	0.8	1.0	-0.2	82.4
(10) Unknown MBE	18	\$8,373					
(11) DBE-certified	2,260	\$400,048	\$462,580	9.8			
(12) Woman-owned DBE	711	\$71,797	\$87,157	1.8			
(13) Minority-owned DBE	1,548	\$328,111	\$375,283	8.0			
(14) Black American-owned DBE	117	\$13,884	\$16,094	0.3			
(15) Asian Pacific American-owned DBE	305	\$79,532	\$89,439	1.9			
(16) Subcontinent Asian American-owned DBE	85	\$20,453	\$22,493	0.5			
(17) Hispanic American-owned DBE	763	\$184,448	\$213,195	4.5			
(18) Native American-owned DBE	272	\$29,397	\$34,062	0.7			
(19) Unknown DBE-MBE	6	\$397					
(20) White male-owned DBE	1	\$140	\$140	0.0			

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

\*Unknown minority-owned businesses and unknown DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 5) accounted for 25 percent of total minority-owned business 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. Additionally, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.



**Figure F-15**

**Funding source: Federally and state-funded**

**Agency: Caltrans and local agencies**

**Time period: January 1, 2011 - December 31, 2014**

**Contract area: Construction and professional services**

**Contract role: Prime contractors**

**Region: California**

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All firms	5,085	\$10,458,344	\$11,231,619				
(2) MBE/WBE	924	\$794,556	\$882,154	7.9	14.0	-6.2	56.0
(3) WBE	220	\$199,221	\$230,016	2.0	2.8	-0.7	74.1
(4) MBE	704	\$595,335	\$652,138	5.8	11.3	-5.5	51.5
(5) Black American owned	42	\$9,741	\$10,971	0.1	1.0	-0.9	10.0
(6) Asian Pacific American owned	96	\$80,928	\$94,085	0.8	0.8	0.0	104.1
(7) Subcontinent Asian American owned	136	\$55,751	\$60,857	0.5	0.3	0.2	158.1
(8) Hispanic American owned	369	\$414,116	\$458,799	4.1	8.8	-4.7	46.6
(9) Native American owned	42	\$21,824	\$27,426	0.2	0.4	-0.1	64.2
(10) Unknown MBE	19	\$12,975					
(11) DBE-certified	399	\$226,166	\$261,207	2.3			
(12) Woman-owned DBE	58	\$23,561	\$33,360	0.3			
(13) Minority-owned DBE	341	\$202,605	\$227,848	2.0			
(14) Black American-owned DBE	22	\$3,164	\$3,909	0.0			
(15) Asian Pacific American-owned DBE	67	\$67,746	\$77,681	0.7			
(16) Subcontinent Asian American-owned DBE	103	\$33,036	\$34,948	0.3			
(17) Hispanic American-owned DBE	132	\$93,323	\$104,035	0.9			
(18) Native American-owned DBE	17	\$5,337	\$7,274	0.1			
(19) Unknown DBE-MBE	0	\$0					
(20) White male-owned DBE	0	\$0	\$0	0.0			

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

\*Unknown minority-owned businesses and unknown DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 5) accounted for 25 percent of total minority-owned business 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. Additionally, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-16

Funding source: Federally and state-funded

Agency: Caltrans and local agencies

Time period: January 1, 2011 - December 31, 2014

Contract area: Construction and professional services

Contract role: Subcontractors and suppliers

Region: California

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All firms	16,582	\$3,961,293	\$4,285,824				
(2) MBE/WBE	6,947	\$1,242,990	\$1,351,576	31.5	33.8	-2.3	93.2
(3) WBE	2,546	\$348,270	\$383,546	8.9	10.7	-1.7	84.0
(4) MBE	4,401	\$894,721	\$968,030	22.6	23.2	-0.6	97.4
(5) Black American owned	543	\$76,521	\$84,260	2.0	3.1	-1.1	63.6
(6) Asian Pacific American owned	792	\$132,951	\$149,198	3.5	3.3	0.2	106.3
(7) Subcontinent Asian American owned	151	\$21,488	\$22,498	0.5	0.9	-0.3	61.7
(8) Hispanic American owned	2,123	\$594,539	\$641,002	15.0	14.0	1.0	106.8
(9) Native American owned	727	\$65,190	\$71,073	1.7	2.0	-0.3	84.1
(10) Unknown MBE	65	\$4,032					
(11) DBE-certified	4,526	\$698,822	\$762,861	17.8			
(12) Woman-owned DBE	1,388	\$140,898	\$155,786	3.6			
(13) Minority-owned DBE	3,132	\$555,294	\$604,445	14.1			
(14) Black American-owned DBE	432	\$48,780	\$54,031	1.3			
(15) Asian Pacific American-owned DBE	582	\$99,822	\$110,545	2.6			
(16) Subcontinent Asian American-owned DBE	135	\$14,454	\$15,302	0.4			
(17) Hispanic American-owned DBE	1,406	\$336,836	\$365,318	8.5			
(18) Native American-owned DBE	565	\$54,847	\$59,249	1.4			
(19) Unknown DBE-MBE	12	\$555					
(20) White male-owned DBE	6	\$2,630	\$2,630	0.1			

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

\*Unknown minority-owned businesses and unknown DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 5) accounted for 25 percent of total minority-owned business 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. Additionally, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

**Figure F-17**

**Funding source: Federal**

**Agency: Caltrans and local agencies**

**Time period: January 1, 2011 - December 31, 2014**

**Contract area: Construction and professional services**

**Contract role: Prime contractors**

**Region: California**

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All firms	2,272	\$7,364,172	\$8,126,095				
(2) MBE/WBE	325	\$452,979	\$536,067	6.6	13.3	-6.7	49.7
(3) WBE	96	\$123,993	\$154,036	1.9	2.5	-0.6	77.1
(4) MBE	229	\$328,986	\$382,031	4.7	10.8	-6.1	43.5
(5) Black American owned	8	\$3,336	\$4,434	0.1	1.0	-1.0	5.2
(6) Asian Pacific American owned	45	\$60,595	\$72,698	0.9	0.8	0.1	115.9
(7) Subcontinent Asian American owned	42	\$32,664	\$37,279	0.5	0.3	0.1	143.6
(8) Hispanic American owned	114	\$217,294	\$254,595	3.1	8.3	-5.2	37.6
(9) Native American owned	16	\$7,717	\$13,024	0.2	0.3	-0.2	46.4
(10) Unknown MBE	4	\$7,380					
(11) DBE-certified	136	\$127,096	\$161,548	2.0			
(12) Woman-owned DBE	26	\$14,871	\$24,669	0.3			
(13) Minority-owned DBE	110	\$112,224	\$136,879	1.7			
(14) Black American-owned DBE	6	\$1,186	\$1,931	0.0			
(15) Asian Pacific American-owned DBE	35	\$54,340	\$63,687	0.8			
(16) Subcontinent Asian American-owned DBE	28	\$16,486	\$18,397	0.2			
(17) Hispanic American-owned DBE	34	\$36,152	\$46,865	0.6			
(18) Native American-owned DBE	7	\$4,060	\$5,998	0.1			
(19) Unknown DBE-MBE	0	\$0					
(20) White male-owned DBE	0	\$0	\$0	0.0			

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

\*Unknown minority-owned businesses and unknown DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 5) accounted for 25 percent of total minority-owned business 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. Additionally, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

**Figure F-18**

**Funding source: Federal**

**Agency: Caltrans and local agencies**

**Time period: January 1, 2011 - December 31, 2014**

**Contract area: Construction and professional services**

**Contract role: Subcontractors and suppliers**

**Region: California**

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All firms	12,331	\$3,175,095	\$3,497,193				
(2) MBE/WBE	5,852	\$1,070,990	\$1,178,203	33.7	34.3	-0.7	98.1
(3) WBE	2,181	\$297,229	\$332,330	9.5	10.6	-1.1	89.8
(4) MBE	3,671	\$773,761	\$845,873	24.2	23.8	0.4	101.8
(5) Black American owned	415	\$69,314	\$76,986	2.2	3.2	-1.0	67.9
(6) Asian Pacific American owned	643	\$118,815	\$134,778	3.9	3.4	0.5	114.0
(7) Subcontinent Asian American owned	140	\$19,611	\$20,609	0.6	0.9	-0.3	63.5
(8) Hispanic American owned	1,792	\$503,345	\$548,479	15.7	14.4	1.3	109.3
(9) Native American owned	633	\$59,367	\$65,021	1.9	1.9	0.0	99.4
(10) Unknown MBE	48	\$3,307					
(11) DBE-certified	3,974	\$632,124	\$694,960	19.9			
(12) Woman-owned DBE	1,265	\$129,816	\$144,529	4.1			
(13) Minority-owned DBE	2,708	\$502,167	\$550,291	15.7			
(14) Black American-owned DBE	329	\$43,665	\$48,895	1.4			
(15) Asian Pacific American-owned DBE	525	\$94,143	\$104,676	3.0			
(16) Subcontinent Asian American-owned DBE	125	\$13,228	\$14,076	0.4			
(17) Hispanic American-owned DBE	1,222	\$300,394	\$328,249	9.4			
(18) Native American-owned DBE	495	\$50,182	\$54,394	1.6			
(19) Unknown DBE-MBE	12	\$555					
(20) White male-owned DBE	1	\$140	\$140	0.0			

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

\*Unknown minority-owned businesses and unknown DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 5) accounted for 25 percent of total minority-owned business 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. Additionally, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-19

Funding source: State

Agency: Caltrans and local agencies

Time period: January 1, 2011 - December 31, 2014

Contract area: Construction and professional services

Contract role: Prime contractors

Region: California

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All firms	2,813	\$3,094,172	\$3,105,524				
(2) MBE/WBE	599	\$341,577	\$346,087	11.1	16.0	-4.9	69.5
(3) WBE	124	\$75,228	\$75,980	2.4	3.6	-1.1	68.7
(4) MBE	475	\$266,349	\$270,107	8.7	12.5	-3.8	69.7
(5) Black American owned	34	\$6,404	\$6,540	0.2	0.8	-0.6	25.7
(6) Asian Pacific American owned	51	\$20,333	\$21,364	0.7	0.9	-0.2	77.1
(7) Subcontinent Asian American owned	94	\$23,087	\$23,576	0.8	0.4	0.4	188.2
(8) Hispanic American owned	255	\$196,822	\$204,222	6.6	9.9	-3.3	66.5
(9) Native American owned	26	\$14,107	\$14,406	0.5	0.5	0.0	98.3
(10) Unknown MBE	15	\$5,596					
(11) DBE-certified	263	\$99,071	\$99,659	3.2			
(12) Woman-owned DBE	32	\$8,690	\$8,690	0.3			
(13) Minority-owned DBE	231	\$90,381	\$90,969	2.9			
(14) Black American-owned DBE	16	\$1,977	\$1,977	0.1			
(15) Asian Pacific American-owned DBE	32	\$13,406	\$13,994	0.5			
(16) Subcontinent Asian American-owned DBE	75	\$16,551	\$16,551	0.5			
(17) Hispanic American-owned DBE	98	\$57,170	\$57,170	1.8			
(18) Native American-owned DBE	10	\$1,276	\$1,276	0.0			
(19) Unknown DBE-MBE	0	\$0					
(20) White male-owned DBE	0	\$0	\$0	0.0			

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

\*Unknown minority-owned businesses and unknown DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 5) accounted for 25 percent of total minority-owned business 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. Additionally, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-20

Funding source: State

Agency: Caltrans and local agencies

Time period: January 1, 2011 - December 31, 2014

Contract area: Construction and professional services

Contract role: Subcontractors and suppliers

Region: California

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All firms	4,251	\$786,198	\$788,631				
(2) MBE/WBE	1,095	\$172,000	\$173,374	22.0	31.6	-9.6	69.5
(3) WBE	365	\$51,040	\$51,216	6.5	11.0	-4.5	59.1
(4) MBE	730	\$120,960	\$122,158	15.5	20.6	-5.1	75.1
(5) Black American owned	128	\$7,207	\$7,270	0.9	2.4	-1.5	38.1
(6) Asian Pacific American owned	149	\$14,136	\$14,416	1.8	2.8	-1.0	65.1
(7) Subcontinent Asian American owned	11	\$1,876	\$1,888	0.2	0.5	-0.3	46.8
(8) Hispanic American owned	331	\$91,194	\$92,535	11.7	12.5	-0.7	94.1
(9) Native American owned	94	\$5,822	\$6,049	0.8	2.4	-1.6	31.7
(10) Unknown MBE	17	\$725					
(11) DBE-certified	552	\$66,698	\$67,900	8.6			
(12) Woman-owned DBE	123	\$11,082	\$11,257	1.4			
(13) Minority-owned DBE	424	\$53,126	\$54,154	6.9			
(14) Black American-owned DBE	103	\$5,114	\$5,135	0.7			
(15) Asian Pacific American-owned DBE	57	\$5,679	\$5,874	0.7			
(16) Subcontinent Asian American-owned DBE	10	\$1,226	\$1,226	0.2			
(17) Hispanic American-owned DBE	184	\$36,442	\$37,063	4.7			
(18) Native American-owned DBE	70	\$4,664	\$4,855	0.6			
(19) Unknown DBE-MBE	0	\$0					
(20) White male-owned DBE	5	\$2,490	\$2,490	0.3			

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

\*Unknown minority-owned businesses and unknown DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 5) accounted for 25 percent of total minority-owned business 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. Additionally, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

**Figure F-21**

**Funding source: Federally and state-funded**

**Agency: Caltrans and local agencies**

**Time period: January 1, 2011 - December 31, 2014**

**Contract area: Construction**

**Contract role: Prime contractors**

**Region: California**

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All firms	3,952	\$8,110,698	\$8,682,192				
(2) MBE/WBE	737	\$662,479	\$729,818	8.4	12.3	-3.9	68.1
(3) WBE	150	\$157,162	\$180,442	2.1	2.2	-0.2	92.6
(4) MBE	587	\$505,317	\$549,376	6.3	10.1	-3.8	62.7
(5) Black American owned	36	\$6,791	\$7,552	0.1	0.6	-0.5	15.1
(6) Asian Pacific American owned	55	\$58,060	\$65,524	0.8	0.4	0.4	200+
(7) Subcontinent Asian American owned	117	\$35,532	\$36,722	0.4	0.2	0.3	200+
(8) Hispanic American owned	335	\$383,300	\$415,255	4.8	8.5	-3.7	56.4
(9) Native American owned	36	\$20,466	\$24,324	0.3	0.5	-0.2	57.0
(10) Unknown MBE	8	\$1,168					
(11) DBE-certified	319	\$177,320	\$198,981	2.3			
(12) Woman-owned DBE	33	\$11,043	\$16,222	0.2			
(13) Minority-owned DBE	286	\$166,277	\$182,760	2.1			
(14) Black American-owned DBE	20	\$2,936	\$3,682	0.0			
(15) Asian Pacific American-owned DBE	44	\$54,655	\$61,637	0.7			
(16) Subcontinent Asian American-owned DBE	90	\$22,679	\$22,679	0.3			
(17) Hispanic American-owned DBE	115	\$80,670	\$87,488	1.0			
(18) Native American-owned DBE	17	\$5,337	\$7,274	0.1			
(19) Unknown DBE-MBE	0	\$0					
(20) White male-owned DBE	0	\$0	\$0	0.0			

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

\*Unknown minority-owned businesses and unknown DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 5) accounted for 25 percent of total minority-owned business 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. Additionally, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

**Figure F-22**

**Funding source: Federally and state-funded**

**Agency: Caltrans and local agencies**

**Time period: January 1, 2011 - December 31, 2014**

**Contract area: Professional services**

**Contract role: Prime contractors**

**Region: California**

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All firms	1,133	\$2,347,646	\$2,549,427				
(2) MBE/WBE	187	\$132,078	\$152,336	6.0	19.8	-13.8	30.2
(3) WBE	70	\$42,059	\$49,575	1.9	4.5	-2.6	42.9
(4) MBE	117	\$90,018	\$102,762	4.0	15.3	-11.3	26.4
(5) Black American owned	6	\$2,950	\$3,635	0.1	2.4	-2.2	6.0
(6) Asian Pacific American owned	41	\$22,868	\$30,319	1.2	2.3	-1.1	52.5
(7) Subcontinent Asian American owned	19	\$20,219	\$25,996	1.0	0.9	0.1	110.2
(8) Hispanic American owned	34	\$30,816	\$39,864	1.6	9.7	-8.2	16.1
(9) Native American owned	6	\$1,358	\$2,946	0.1	0.0	0.1	200+
(10) Unknown MBE	11	\$11,807					
(11) DBE-certified	80	\$48,847	\$62,226	2.4			
(12) Woman-owned DBE	25	\$12,519	\$17,138	0.7			
(13) Minority-owned DBE	55	\$36,328	\$45,088	1.8			
(14) Black American-owned DBE	2	\$227	\$227	0.0			
(15) Asian Pacific American-owned DBE	23	\$13,090	\$16,044	0.6			
(16) Subcontinent Asian American-owned DBE	13	\$10,358	\$12,269	0.5			
(17) Hispanic American-owned DBE	17	\$12,653	\$16,548	0.6			
(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			

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

\*Unknown minority-owned businesses and unknown DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 5) accounted for 25 percent of total minority-owned business 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. Additionally, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.



Figure F-23

Funding source: Federally and state-funded

Agency: Caltrans and local agencies

Time period: January 1, 2011 - December 31, 2014

Contract area: Construction

Contract role: Subcontractors and suppliers

Region: California

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All firms	12,879	\$2,960,001	\$3,197,818				
(2) MBE/WBE	5,387	\$852,272	\$926,205	29.0	33.7	-4.7	86.0
(3) WBE	1,980	\$250,200	\$276,331	8.6	10.0	-1.4	86.3
(4) MBE	3,407	\$602,072	\$649,875	20.3	23.7	-3.3	85.9
(5) Black American owned	446	\$61,660	\$67,182	2.1	3.1	-1.0	68.0
(6) Asian Pacific American owned	525	\$66,771	\$76,590	2.4	3.1	-0.7	78.2
(7) Subcontinent Asian American owned	85	\$3,213	\$3,610	0.1	0.8	-0.7	14.6
(8) Hispanic American owned	1,695	\$413,338	\$444,421	13.9	14.8	-0.9	94.2
(9) Native American owned	615	\$53,728	\$58,071	1.8	2.0	-0.2	91.5
(10) Unknown MBE	41	\$3,361					
(11) DBE-certified	3,487	\$475,630	\$520,703	16.3			
(12) Woman-owned DBE	1,054	\$99,220	\$111,260	3.5			
(13) Minority-owned DBE	2,433	\$376,410	\$409,443	12.8			
(14) Black American-owned DBE	354	\$41,760	\$46,196	1.4			
(15) Asian Pacific American-owned DBE	388	\$51,610	\$58,594	1.8			
(16) Subcontinent Asian American-owned DBE	82	\$3,125	\$3,481	0.1			
(17) Hispanic American-owned DBE	1,126	\$234,399	\$253,100	7.9			
(18) Native American-owned DBE	479	\$45,108	\$48,072	1.5			
(19) Unknown DBE-MBE	4	\$408					
(20) White male-owned DBE	0	\$0	\$0	0.0			

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

\*Unknown minority-owned businesses and unknown DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 5) accounted for 25 percent of total minority-owned business 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. Additionally, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

**Figure F-24**

**Funding source: Federally and state-funded**

**Agency: Caltrans and local agencies**

**Time period: January 1, 2011 - December 31, 2014**

**Contract area: Professional services**

**Contract role: Subcontractors and suppliers**

**Region: California**

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All firms	3,703	\$1,001,292	\$1,088,006				
(2) MBE/WBE	1,560	\$390,718	\$425,371	39.1	34.3	4.8	113.9
(3) WBE	566	\$98,070	\$107,216	9.9	12.5	-2.7	78.7
(4) MBE	994	\$292,648	\$318,156	29.2	21.8	7.4	134.1
(5) Black American owned	97	\$14,861	\$17,113	1.6	3.1	-1.5	51.0
(6) Asian Pacific American owned	267	\$66,179	\$72,529	6.7	3.9	2.8	171.0
(7) Subcontinent Asian American owned	66	\$18,274	\$18,850	1.7	1.1	0.7	161.4
(8) Hispanic American owned	428	\$181,201	\$196,627	18.1	11.8	6.3	153.0
(9) Native American owned	112	\$11,461	\$13,036	1.2	1.9	-0.7	62.0
(10) Unknown MBE	24	\$671					
(11) DBE-certified	1,039	\$223,192	\$242,157	22.3			
(12) Woman-owned DBE	334	\$41,679	\$44,526	4.1			
(13) Minority-owned DBE	699	\$178,883	\$195,002	17.9			
(14) Black American-owned DBE	78	\$7,020	\$7,828	0.7			
(15) Asian Pacific American-owned DBE	194	\$48,212	\$51,962	4.8			
(16) Subcontinent Asian American-owned DBE	53	\$11,329	\$11,826	1.1			
(17) Hispanic American-owned DBE	280	\$102,437	\$112,214	10.3			
(18) Native American-owned DBE	86	\$9,738	\$11,171	1.0			
(19) Unknown DBE-MBE	8	\$147					
(20) White male-owned DBE	6	\$2,630	\$2,630	0.2			

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

\*Unknown minority-owned businesses and unknown DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 5) accounted for 25 percent of total minority-owned business 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. Additionally, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

**Figure F-25**

**Funding source: Federally and state-funded**

**Agency: Caltrans**

**Time period: January 1, 2011 - December 31, 2014**

**Contract area: Construction and professional services**

**Contract role: Prime contractors, subcontractors, and suppliers**

**Region: California**

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All firms	16,479	\$12,212,161	\$12,375,738				
(2) MBE/WBE	5,921	\$1,661,364	\$1,668,307	13.5	18.2	-4.7	74.1
(3) WBE	2,033	\$439,909	\$444,127	3.6	4.3	-0.7	83.6
(4) MBE	3,888	\$1,221,455	\$1,224,180	9.9	13.9	-4.0	71.1
(5) Black American owned	475	\$65,985	\$67,480	0.5	1.4	-0.9	38.5
(6) Asian Pacific American owned	617	\$169,896	\$173,713	1.4	1.4	0.0	101.1
(7) Subcontinent Asian American owned	245	\$69,175	\$70,118	0.6	0.5	0.1	125.6
(8) Hispanic American owned	1,847	\$830,997	\$842,152	6.8	9.9	-3.1	68.4
(9) Native American owned	639	\$69,809	\$70,716	0.6	0.7	-0.1	80.5
(10) Unknown MBE	65	\$15,594					
(11) DBE-certified	3,667	\$736,562	\$740,087	6.0			
(12) Woman-owned DBE	1,061	\$122,388	\$124,068	1.0			
(13) Minority-owned DBE	2,600	\$611,544	\$613,388	5.0			
(14) Black American-owned DBE	368	\$39,600	\$40,257	0.3			
(15) Asian Pacific American-owned DBE	433	\$135,580	\$136,591	1.1			
(16) Subcontinent Asian American-owned DBE	205	\$44,819	\$44,895	0.4			
(17) Hispanic American-owned DBE	1,097	\$342,086	\$342,581	2.8			
(18) Native American-owned DBE	488	\$49,029	\$49,064	0.4			
(19) Unknown DBE-MBE	9	\$430					
(20) White male-owned DBE	6	\$2,630	\$2,630	0.0			

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

\*Unknown minority-owned businesses and unknown DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 5) accounted for 25 percent of total minority-owned business 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. Additionally, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

**Figure F-26**

**Funding source: Federal**

**Agency: Local agencies**

**Time period: January 1, 2011 - December 31, 2014**

**Contract area: Construction and professional services**

**Contract role: Prime contractors, subcontractors, and suppliers**

**Region: California**

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All firms	5,135	\$2,163,324	\$3,083,767				
(2) MBE/WBE	1,919	\$355,432	\$538,791	17.5	24.7	-7.2	70.7
(3) WBE	724	\$104,136	\$165,062	5.4	7.5	-2.2	70.9
(4) MBE	1,195	\$251,296	\$373,729	12.1	17.2	-5.0	70.6
(5) Black American owned	109	\$20,195	\$28,037	0.9	2.2	-1.3	41.8
(6) Asian Pacific American owned	267	\$42,987	\$67,786	2.2	1.9	0.3	115.6
(7) Subcontinent Asian American owned	42	\$8,064	\$12,882	0.4	0.6	-0.2	67.9
(8) Hispanic American owned	630	\$162,182	\$238,022	7.7	11.2	-3.5	68.9
(9) Native American owned	128	\$16,454	\$27,002	0.9	1.3	-0.4	69.1
(10) Unknown MBE	19	\$1,414					
(11) DBE-certified	1,233	\$183,750	\$277,514	9.0			
(12) Woman-owned DBE	378	\$41,583	\$64,414	2.1			
(13) Minority-owned DBE	855	\$142,167	\$213,100	6.9			
(14) Black American-owned DBE	85	\$12,263	\$17,568	0.6			
(15) Asian Pacific American-owned DBE	212	\$30,991	\$49,888	1.6			
(16) Subcontinent Asian American-owned DBE	33	\$2,672	\$5,376	0.2			
(17) Hispanic American-owned DBE	430	\$85,713	\$123,765	4.0			
(18) Native American-owned DBE	92	\$10,403	\$16,503	0.5			
(19) Unknown DBE-MBE	3	\$125					
(20) White male-owned DBE	0	\$0	\$0	0.0			

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

\*Unknown minority-owned businesses and unknown DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 5) accounted for 25 percent of total minority-owned business 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. Additionally, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

**Figure F-27**

**Funding source: Federally and state-funded**

**Agency: Caltrans and local agencies**

**Time period: January 1, 2011 - December 31, 2014**

**Contract area: Construction and professional services**

**Contract role: Prime contractors, subcontractors, and suppliers**

**Region: North (district 1, 2, and 3)**

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All firms	5,611	\$2,599,893	\$2,796,559				
(2) MBE/WBE	1,873	\$338,644	\$367,458	13.1	18.0	-4.9	73.0
(3) WBE	714	\$110,632	\$122,540	4.4	6.1	-1.8	71.4
(4) MBE	1,159	\$228,012	\$244,919	8.8	11.9	-3.1	73.8
(5) Black American owned	149	\$27,503	\$29,095	1.0	2.1	-1.0	50.1
(6) Asian Pacific American owned	172	\$32,169	\$37,411	1.3	1.2	0.1	111.0
(7) Subcontinent Asian American owned	55	\$14,270	\$14,764	0.5	0.5	0.0	105.0
(8) Hispanic American owned	544	\$117,839	\$130,023	4.6	7.0	-2.4	66.0
(9) Native American owned	226	\$28,860	\$33,626	1.2	1.0	0.2	115.4
(10) Unknown MBE	13	\$7,370					
(11) DBE-certified	1,233	\$179,489	\$197,009	7.0			
(12) Woman-owned DBE	384	\$45,664	\$52,736	1.9			
(13) Minority-owned DBE	844	\$131,335	\$141,784	5.1			
(14) Black American-owned DBE	111	\$11,998	\$12,563	0.4			
(15) Asian Pacific American-owned DBE	108	\$24,330	\$27,344	1.0			
(16) Subcontinent Asian American-owned DBE	43	\$7,629	\$7,661	0.3			
(17) Hispanic American-owned DBE	394	\$62,391	\$67,457	2.4			
(18) Native American-owned DBE	187	\$24,955	\$26,758	1.0			
(19) Unknown DBE-MBE	1	\$32					
(20) White male-owned DBE	5	\$2,490	\$2,490	0.1			

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

\*Unknown minority-owned businesses and unknown DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 5) accounted for 25 percent of total minority-owned business 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. Additionally, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

**Figure F-28**

**Funding source: Federally and state-funded**

**Agency: Caltrans and local agencies**

**Time period: January 1, 2011 - December 31, 2014**

**Contract area: Construction and professional services**

**Contract role: Prime contractors, subcontractors, and suppliers**

**Region: Bay area (district 4)**

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All firms	3,535	\$2,332,475	\$2,470,940				
(2) MBE/WBE	1,291	\$330,690	\$359,509	14.5	17.9	-3.3	81.4
(3) WBE	521	\$63,553	\$68,315	2.8	4.5	-1.8	60.8
(4) MBE	770	\$267,136	\$291,194	11.8	13.3	-1.5	88.4
(5) Black American owned	78	\$15,505	\$17,913	0.7	1.6	-0.9	45.4
(6) Asian Pacific American owned	120	\$35,581	\$43,374	1.8	1.3	0.5	138.7
(7) Subcontinent Asian American owned	56	\$12,088	\$12,657	0.5	0.3	0.2	152.4
(8) Hispanic American owned	419	\$195,848	\$210,247	8.5	9.2	-0.7	92.3
(9) Native American owned	84	\$6,305	\$7,002	0.3	0.9	-0.6	30.9
(10) Unknown MBE	13	\$1,808					
(11) DBE-certified	811	\$144,372	\$162,583	6.6			
(12) Woman-owned DBE	273	\$24,142	\$26,644	1.1			
(13) Minority-owned DBE	537	\$120,090	\$135,798	5.5			
(14) Black American-owned DBE	64	\$12,518	\$14,180	0.6			
(15) Asian Pacific American-owned DBE	96	\$29,055	\$36,423	1.5			
(16) Subcontinent Asian American-owned DBE	50	\$8,988	\$9,487	0.4			
(17) Hispanic American-owned DBE	268	\$65,818	\$71,803	2.9			
(18) Native American-owned DBE	58	\$3,645	\$3,905	0.2			
(19) Unknown DBE-MBE	1	\$66					
(20) White male-owned DBE	1	\$140	\$140	0.0			

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

\*Unknown minority-owned businesses and unknown DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 5) accounted for 25 percent of total minority-owned business 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. Additionally, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

**Figure F-29**

**Funding source: Federally and state-funded**

**Agency: Caltrans and local agencies**

**Time period: January 1, 2011 - December 31, 2014**

**Contract area: Construction and professional services**

**Contract role: Prime contractors, subcontractors, and suppliers**

**Region: Central (districts 5, 6, 9, and 10)**

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All firms	5,374	\$2,764,291	\$3,024,371				
(2) MBE/WBE	1,983	\$395,597	\$459,372	15.2	22.7	-7.5	66.8
(3) WBE	752	\$94,234	\$119,029	3.9	6.0	-2.1	65.2
(4) MBE	1,231	\$301,363	\$340,343	11.3	16.7	-5.4	67.4
(5) Black American owned	144	\$17,899	\$21,010	0.7	1.3	-0.6	52.1
(6) Asian Pacific American owned	135	\$11,482	\$15,035	0.5	1.6	-1.1	31.9
(7) Subcontinent Asian American owned	58	\$12,439	\$14,522	0.5	0.5	0.0	98.4
(8) Hispanic American owned	595	\$237,689	\$267,338	8.8	12.3	-3.4	71.9
(9) Native American owned	278	\$20,251	\$22,438	0.7	1.0	-0.3	72.3
(10) Unknown MBE	21	\$1,603					
(11) DBE-certified	1,256	\$173,170	\$204,406	6.8			
(12) Woman-owned DBE	407	\$34,816	\$45,273	1.5			
(13) Minority-owned DBE	849	\$138,354	\$159,133	5.3			
(14) Black American-owned DBE	89	\$12,309	\$14,792	0.5			
(15) Asian Pacific American-owned DBE	107	\$10,101	\$12,724	0.4			
(16) Subcontinent Asian American-owned DBE	47	\$7,191	\$9,087	0.3			
(17) Hispanic American-owned DBE	390	\$92,690	\$105,084	3.5			
(18) Native American-owned DBE	212	\$15,702	\$17,446	0.6			
(19) Unknown DBE-MBE	4	\$360					
(20) White male-owned DBE	0	\$0	\$0	0.0			

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

\*Unknown minority-owned businesses and unknown DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 5) accounted for 25 percent of total minority-owned business 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. Additionally, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

**Figure F-30**

**Funding source: Federally and state-funded**

**Agency: Caltrans and local agencies**

**Time period: January 1, 2011 - December 31, 2014**

**Contract area: Construction and professional services**

**Contract role: Prime contractors, subcontractors, and suppliers**

**Region: South (districts 7, 8, 11, and 12)**

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All firms	7,147	\$6,722,978	\$7,225,573				
(2) MBE/WBE	2,724	\$972,615	\$1,047,391	14.5	19.3	-4.8	75.1
(3) WBE	779	\$279,071	\$303,679	4.2	4.2	0.0	101.1
(4) MBE	1,945	\$693,544	\$743,712	10.3	15.1	-4.8	68.0
(5) Black American owned	214	\$25,355	\$27,943	0.4	1.5	-1.1	26.7
(6) Asian Pacific American owned	461	\$134,646	\$147,651	2.0	1.6	0.4	124.5
(7) Subcontinent Asian American owned	118	\$38,441	\$41,061	0.6	0.5	0.0	108.5
(8) Hispanic American owned	934	\$457,279	\$491,015	6.8	10.9	-4.1	62.3
(9) Native American owned	181	\$31,597	\$36,043	0.5	0.6	-0.1	81.1
(10) Unknown MBE	37	\$6,226					
(11) DBE-certified	1,625	\$427,958	\$460,071	6.4			
(12) Woman-owned DBE	382	\$59,838	\$64,493	0.9			
(13) Minority-owned DBE	1,243	\$368,120	\$395,577	5.5			
(14) Black American-owned DBE	190	\$15,118	\$16,404	0.2			
(15) Asian Pacific American-owned DBE	338	\$104,081	\$111,728	1.5			
(16) Subcontinent Asian American-owned DBE	98	\$23,682	\$24,042	0.3			
(17) Hispanic American-owned DBE	486	\$209,260	\$225,005	3.1			
(18) Native American-owned DBE	125	\$15,881	\$18,399	0.3			
(19) Unknown DBE-MBE	6	\$97					
(20) White male-owned DBE	0	\$0	\$0	0.0			

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

\*Unknown minority-owned businesses and unknown DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 5) accounted for 25 percent of total minority-owned business 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. Additionally, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.



Figure F-31

Funding source: Federally and state-funded

Small Contracts

Agency: Caltrans and local agencies

Time period: January 1, 2011 - December 31, 2014

Contract area: Construction and professional services

Contract role: Prime contractors

Region: California

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All firms	3,770	\$1,334,103	\$1,644,506				
(2) MBE/WBE	778	\$219,606	\$283,520	17.2	29.2	-12.0	59.0
(3) WBE	185	\$40,437	\$64,218	3.9	9.2	-5.3	42.3
(4) MBE	593	\$179,168	\$219,302	13.3	20.0	-6.6	66.7
(5) Black American owned	39	\$5,030	\$5,844	0.4	1.9	-1.5	18.9
(6) Asian Pacific American owned	74	\$24,941	\$35,174	2.1	1.9	0.2	109.7
(7) Subcontinent Asian American owned	125	\$34,440	\$36,129	2.2	0.9	1.3	200+
(8) Hispanic American owned	306	\$103,012	\$128,922	7.8	13.7	-5.9	57.0
(9) Native American owned	36	\$9,234	\$13,234	0.8	1.5	-0.7	55.1
(10) Unknown MBE	13	\$2,512					
(11) DBE-certified	353	\$99,133	\$122,852	7.5			
(12) Woman-owned DBE	50	\$12,737	\$18,607	1.1			
(13) Minority-owned DBE	303	\$86,396	\$104,245	6.3			
(14) Black American-owned DBE	22	\$3,164	\$3,909	0.2			
(15) Asian Pacific American-owned DBE	55	\$20,479	\$29,315	1.8			
(16) Subcontinent Asian American-owned DBE	97	\$23,412	\$23,961	1.5			
(17) Hispanic American-owned DBE	113	\$35,605	\$41,386	2.5			
(18) Native American-owned DBE	16	\$3,737	\$5,675	0.3			
(19) Unknown DBE-MBE	0	\$0					
(20) White male-owned DBE	0	\$0	\$0	0.0			

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

\*Unknown minority-owned businesses and unknown DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 5) accounted for 25 percent of total minority-owned business 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. Additionally, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-32

Funding source: Federally and state-funded

Agency: Caltrans and local agencies

Time period: January 1, 2011 - December 31, 2014

Contract area: Construction and professional services

Contract role: Prime contractors

Region: California

Large Contracts

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All firms	1,315	\$9,124,241	\$9,587,112				
(2) MBE/WBE	146	\$574,950	\$598,635	6.2	11.4	-5.2	54.6
(3) WBE	35	\$158,783	\$165,798	1.7	1.7	0.1	104.6
(4) MBE	111	\$416,167	\$432,836	4.5	9.8	-5.3	46.2
(5) Black American owned	3	\$4,710	\$5,100	0.1	0.8	-0.8	6.4
(6) Asian Pacific American owned	22	\$55,987	\$58,866	0.6	0.6	0.0	100.9
(7) Subcontinent Asian American owned	11	\$21,311	\$24,527	0.3	0.2	0.0	106.8
(8) Hispanic American owned	63	\$311,104	\$330,203	3.4	7.9	-4.5	43.6
(9) Native American owned	6	\$12,590	\$14,141	0.1	0.2	0.0	75.5
(10) Unknown MBE	6	\$10,464					
(11) DBE-certified	46	\$127,033	\$138,355	1.4			
(12) Woman-owned DBE	8	\$10,825	\$14,753	0.2			
(13) Minority-owned DBE	38	\$116,209	\$123,602	1.3			
(14) Black American-owned DBE	0	\$0	\$0	0.0			
(15) Asian Pacific American-owned DBE	12	\$47,267	\$48,366	0.5			
(16) Subcontinent Asian American-owned DBE	6	\$9,625	\$10,987	0.1			
(17) Hispanic American-owned DBE	19	\$57,718	\$62,650	0.7			
(18) Native American-owned DBE	1	\$1,600	\$1,600	0.0			
(19) Unknown DBE-MBE	0	\$0					
(20) White male-owned DBE	0	\$0	\$0	0.0			

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

\*Unknown minority-owned businesses and unknown DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 5) accounted for 25 percent of total minority-owned business 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. Additionally, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-33

Funding source: Federal

Agency: Caltrans and local agencies

Time period: January 1, 2011 - December 31, 2014

Contract area: Construction and professional services

Contract role: Prime contractors, subcontractors, and suppliers

Region: California

## Analysis of Potential DBEs

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All firms	14,603	\$10,539,267	\$11,623,288				
(2) MBE/WBE	6,177	\$1,523,969	\$1,714,270		17.6		
(3) WBE	2,277	\$421,222	\$486,367		4.2		
(4) MBE	3,900	\$1,102,747	\$1,227,904		13.5		
(5) Black American owned	423	\$72,651	\$81,727		1.7		
(6) Asian Pacific American owned	688	\$179,411	\$207,356		1.6		
(7) Subcontinent Asian American owned	182	\$52,275	\$57,605		0.5		
(8) Hispanic American owned	1,906	\$720,639	\$803,005		8.9		
(9) Native American owned	649	\$67,084	\$78,211		0.8		
(10) Unknown MBE	52	\$10,687					
(11) DBE-certified	4,110	\$759,219	\$856,508	7.4			
(12) Woman-owned DBE	1,291	\$144,687	\$169,199	1.5			
(13) Minority-owned DBE	2,818	\$614,392	\$687,170	5.9			
(14) Black American-owned DBE	335	\$44,852	\$50,816	0.4			
(15) Asian Pacific American-owned DBE	560	\$148,482	\$168,404	1.4			
(16) Subcontinent Asian American-owned DBE	153	\$29,714	\$32,490	0.3			
(17) Hispanic American-owned DBE	1,256	\$336,547	\$375,077	3.2			
(18) Native American-owned DBE	502	\$54,243	\$60,384	0.5			
(19) Unknown DBE-MBE	12	\$555					
(20) White male-owned DBE	1	\$140	\$140	0.0			

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

\*Unknown minority-owned businesses and unknown DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 5) accounted for 25 percent of total minority-owned business 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. Additionally, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-34

Funding source: Federal

Agency: Caltrans and local agencies

Time period: January 1, 2011 - December 31, 2014

Contract area: Construction

Contract role: Prime contractors, subcontractors, and suppliers

Region: California

## Analysis of Potential DBEs

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All firms	11,056	\$7,961,894	\$8,757,419				
(2) MBE/WBE	4,741	\$1,096,047	\$1,231,437		15.7		
(3) WBE	1,749	\$313,335	\$361,819		3.5		
(4) MBE	2,992	\$782,712	\$869,618		12.2		
(5) Black American owned	349	\$56,823	\$62,917		1.4		
(6) Asian Pacific American owned	432	\$106,608	\$123,006		1.2		
(7) Subcontinent Asian American owned	109	\$16,070	\$17,628		0.3		
(8) Hispanic American owned	1,521	\$545,454	\$603,412		8.5		
(9) Native American owned	549	\$54,795	\$62,655		0.9		
(10) Unknown MBE	32	\$2,962					
(11) DBE-certified	3,147	\$517,156	\$582,100	6.6			
(12) Woman-owned DBE	974	\$97,605	\$114,649	1.3			
(13) Minority-owned DBE	2,173	\$419,551	\$467,451	5.3			
(14) Black American-owned DBE	278	\$38,631	\$43,783	0.5			
(15) Asian Pacific American-owned DBE	365	\$93,894	\$107,113	1.2			
(16) Subcontinent Asian American-owned DBE	98	\$9,665	\$10,026	0.1			
(17) Hispanic American-owned DBE	1,002	\$232,282	\$257,152	2.9			
(18) Native American-owned DBE	426	\$44,671	\$49,377	0.6			
(19) Unknown DBE-MBE	4	\$408					
(20) White male-owned DBE	0	\$0	\$0	0.0			

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

\*Unknown minority-owned businesses and unknown DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 5) accounted for 25 percent of total minority-owned business 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. Additionally, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-35

Funding source: Federal

Agency: Caltrans and local agencies

Time period: January 1, 2011 - December 31, 2014

Contract area: Professional services

Contract role: Prime contractors, subcontractors, and suppliers

Region: California

## Analysis of Potential DBEs

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All firms	3,547	\$2,577,374	\$2,865,868				
(2) MBE/WBE	1,436	\$427,922	\$482,833		23.4		
(3) WBE	528	\$107,887	\$124,548		6.1		
(4) MBE	908	\$320,035	\$358,286		17.4		
(5) Black American owned	74	\$15,827	\$18,716		2.7		
(6) Asian Pacific American owned	256	\$72,802	\$84,793		2.8		
(7) Subcontinent Asian American owned	73	\$36,205	\$40,408		1.0		
(8) Hispanic American owned	385	\$175,185	\$198,948		10.2		
(9) Native American owned	100	\$12,289	\$15,421		0.6		
(10) Unknown MBE	20	\$7,725					
(11) DBE-certified	963	\$242,064	\$274,408	9.6			
(12) Woman-owned DBE	317	\$47,082	\$54,549	1.9			
(13) Minority-owned DBE	645	\$194,841	\$219,719	7.7			
(14) Black American-owned DBE	57	\$6,221	\$7,027	0.2			
(15) Asian Pacific American-owned DBE	195	\$54,588	\$61,296	2.1			
(16) Subcontinent Asian American-owned DBE	55	\$20,049	\$22,471	0.8			
(17) Hispanic American-owned DBE	254	\$104,264	\$117,923	4.1			
(18) Native American-owned DBE	76	\$9,572	\$11,002	0.4			
(19) Unknown DBE-MBE	8	\$147					
(20) White male-owned DBE	1	\$140	\$140	0.0			

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

\*Unknown minority-owned businesses and unknown DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 5) accounted for 25 percent of total minority-owned business 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. Additionally, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.