



Small and Disadvantaged Business Enterprise (SB/DBE) Issues in Caltrans Contract and Bid Process

Requested by

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Executive Summary

Background

The Caltrans Office of Civil Rights (OCR) has been and wishes to continue promoting opportunities for Small and Disadvantaged Business Enterprises (SB/DBEs) to participate in state and federal contracts. It is leading a number of outreach activities for that purpose and customizes its contracts accordingly and in compliance with the State of California laws and regulations and with the Code of Federal Regulations. To inform its decisionmaking related to outreach and contracting Caltrans collects supporting data inhouse, among other things, and it engages third-party consultants to conduct disparity studies on a regular basis. Despite OCR's efforts to expand the pool of disadvantaged and small businesses, the perception is that too many businesses still face obstacles and as a result do not make it through the bid process.

A strategic management goal of the OCR is to increase the amount of business awarded to SB/DBEs. To better achieve this goal, OCR seeks to know why SB/DBEs are failing to make it through the Caltrans procurement and contracting process and how it can increase and enhance its engagement with SB/DBEs to increase their success. Caltrans therefore requested that the Institute for Transportation Studies conduct this Preliminary Investigation.

Objectives of Preliminary Investigation

The objectives of this Preliminary Investigation are twofold: (1) to identify the challenges, causes, and reasons for failure of SB/DBEs to be successful bidders and serve as prime- or subcontractors on Caltrans projects or as Caltrans service providers and, accordingly, (2) to recommend means for Caltrans to further foster and develop the requisite capabilities for SB/DBEs to be successful as bidders and contractors (e.g., through training, workshops, education, or outreach forums) to augment or replace Caltrans' already extensive efforts in this regard.

Overview of Preliminary Investigation Document

This Preliminary Investigation document, on one hand, outlines challenges encountered by SB/DBEs in the process of getting certified, entering into a contract, executing on projects or delivering services, and sustaining or growing their business. On the other hand, it summarizes OCR's current ongoing efforts that are aiming to expand contracting with SB/DBEs. Along the way it identifies opportunities that warrant more in-depth investigation for OCR to target its programming and resource allocation as it aims to reduce obstacles or otherwise improve the ability of SBs/DBEs to successfully contract with Caltrans.

Methodology

The methodology followed to conduct this Preliminary Investigation was for the authors to review online publications (e.g., pages posted on the Caltrans-, the US DOT-, the State of California-, and various Federal Government websites), the professional literature (e.g., reports of the FHWA and the TRB), as well as academic journals (e.g., peer-reviewed papers in journals of the American Society of Civil Engineers) on the subject of SB/DBEs. The authors reviewed disparity

studies conducted on behalf of Caltrans as well as other documents requested and obtained from Caltrans (e.g., documents describing outreach efforts). They viewed online youtube.com postings by Caltrans and one author attended the 2022 DBE Summit hosted by Caltrans.

In addition, the authors conducted a number of one-on-one in-depth telephone interviews with stakeholders in various SB/DBEs processes, including selected Caltrans personnel, industry consultants, personnel of SB/DBE enterprises, service providers and prime contractors on Caltrans work who subcontract with SB/DBEs. The goal was to hear stakeholders' concerns related to SB/DBEs and obtain their suggestions of what might be done to increase the likelihood of SB/DBEs success when performing Caltrans work.

Finally, the authors compiled this Preliminary Investigation document and shared a draft of it with selected stakeholders who had during the interview process expressed interest in offering feedback. The authors then incorporated feedback prior to finalizing the document.

Summary of Findings and Recommendations

Findings and recommendations from this Preliminary Investigation are intended to inform OCR's further research, development, and implementation of tools and practices to support an increase in the amount of business awarded to SB/DBEs as appropriate, while meeting all regulatory requirements at the State and Federal level.

The authors recommend that OCR continue with its numerous initiatives already underway related to SB/DBE outreach and contracting practices. At the same time, they recommend that OCR address the following, interrelated considerations (listed in no specific order):

1. California Unified Certification Program (CUCP) DBE System

Caltrans manages the database of SB/DBE-certified enterprises in the State of California, referred to as the DBE System (<https://caltrans.dbesystem.com/>). This database is augmented and kept up-to-date by Caltrans and other certifying organizations as well as by SB/DBE-certified enterprises themselves. It is of utmost importance that the data in this DBE System be as accurate as possible because it is used by firms doing business with Caltrans to find SB/DBEs for work they seek to contract out.

Several stakeholders interviewed by the authors expressed frustration with the inadequacy of the data in DBE System. Based on this input, further research is recommended to identify specific pain points experienced by those who enter new data and maintain the DBE System and by different users of the DBE System. *It is recommended that Caltrans perform a process analysis from the perspective of different users of this DBE System in order to identify improvement opportunities.*

2. Process Improvement

Caltrans in-house processes include SB/DBE outreach, certification application review and approval, bid proposal assessment and contract award, tracking of DBE contract amounts and associated work scope on projects, DBE System maintenance, etc. The implementation of in-house processes is done at the Caltrans District level, but there appear to be different levels of implementation maturity across Districts. *It is recommended that OCR track and verify that SB/DBE-related best practices within Caltrans (e.g., the Protégé Program), to the extent they are applicable, are promoted and implemented consistently across all 12 Caltrans Districts.*

For certification application review and approval, Caltrans already has conducted a Lean Six Sigma study which led to significant improvements in the overall process and individual process steps. *It is recommended that OCR conduct similar studies for other processes as well, on topics judiciously selected to benefit both Caltrans- as well as non-Caltrans personnel, and track the data not only during the study but on an on-going basis after the study itself has been completed.*

With so many work processes having been reimaged out of necessity due to the Covid-19 pandemic, people have been forced to interact virtually rather than in-person. *It is recommended that OCR assess any beneficial differences between virtual and in-person events and decide if and to what extent virtual events should be continued to replace or supplement in-person events.*

3. Expectation Management and Contract Specifics

Caltrans has been responsible and ambitious in its goal setting for SB/DBEs contract amounts. Increasingly ambitious targets are increasingly difficult to meet. Continuously increasing goals is paradoxical, in a way, because the ultimate reason for setting SB/DBEs targets is to reduce disparities, so success in this regard would mean that goal setting no longer is needed.

In the current context, service providers and prime contractors are challenged in meeting what they perceive to be high targets. Prime contractors' bid protests reflect differences in interpretations of scopes of work Caltrans will account for or not, and what constitutes meeting a target versus putting in a good-faith effort. *It is recommended that OCR further strive to reduce the amount of potential ambiguity in its contracting practices when (1) spelling out SB/DBE goals for a specific project (incl. using specific NAICS codes), and (2) assessing whether an apparent low bidder has indeed met those goals. It is also recommended that OCR review its goal-setting practices while considering opportunities for better tailoring them to the availability of DBEs that are participating in a regional market and adjusting the goals commensurately for project size.*

4. Tracking

Caltrans obtains and has access to extensive data that, if resources can be dedicated to capturing it cogently, could inform its decisionmaking. For example, Caltrans' current practice is to record DBE-related specifics pertaining the apparent low bidder and the next two bidders, that is, three bids in total of all bids received. If these specifics were tracked for all bids received, the data set would be richer and more informative when analyzed, and accordingly could better inform improvements to Caltrans' SB/DBE-related initiatives. *It is recommended that Caltrans invest in more comprehensive tracking of data it can capture, such as all data of SB/DBEs that are listed in bid proposals submitted by prime contractors, to better tailor its decisionmaking.*

5. Metrics

Related to process improvement, the authors of this Preliminary Investigation obtained data related to OCR meeting CFR Title 49 Part 26 requirements of its SB/DBE program (meeting reporting requirements), however they did not have time to inquire about metrics OCR is using in-house to gauge success in reaching the goals it sets out to meet. *It is recommended that OCR develop new—if not already available—performance metrics (process metrics and outcome metrics) so that it can systematically collect data to track SB/DBE enterprise engagement and performance over time, as well as gauge success and improvement opportunities of initiatives OCR has underway. Furthermore, it is recommended that Caltrans develop dashboards to visually display a variety of metrics so they can be interpreted holistically and allow OCR to make performance trade-offs.*

6. Leveraging Resources across Organizations

It is recommended that Caltrans further engage with third-party organizations that may be able to create support arrangements to get SB/DBEs started until they become self-sustaining (e.g., including financial institutions that can provide working capital and bonding, or incentives for prime contractors to provide such support).

7. Learning from Best Practices of other Government and Private Organizations

Caltrans already has good working relationships to exchange ideas and leverage resources with other government- and private organizations that have SB/DBE initiatives underway. As practices evolve, contexts and regulations change, more lessons are learned, and additional publications on the subject become available, *it is recommended that Caltrans invest in follow-on research to conduct an in-depth review of new best practices to achieve to SB/DBE success that are used by other government and non-government agencies in the State of California and in other states.*

An in-depth review would include publications cited in this Preliminary Investigation, other publications listed in this document's Bibliography and References section, and any additional publications available. Such a review can reveal new practices or subtleties and refinements of practices in use by others that are of potential value to Caltrans.

Gaps in Findings

This document presents only a Preliminary Investigation. Additional in-depth research is warranted in several areas to address the concerns raised in this document.

This Preliminary Investigation was informed by numerous sources of information and literature related to SB/SBEs. In fact, more documents were identified by the authors than they had time to review in-depth given the time constraints of this Preliminary Investigation. Many more documents can be identified. The sources listed in the Bibliography and References section should be augmented and a systematic literature review should be conducted on the topic of SB/DBEs' successes and challenges.

Data was obtained from Caltrans describing their ongoing SB/SBE initiatives. To inform future initiatives, it would be of value to expand on this data in greater detail. Likewise, it would be of value to document in a systematic manner what Caltrans has done over the years, compile data, and apply metrics to assess how well certain initiatives have been successful or not.

One-on-one interviews with stakeholders have provided useful insights that are reflected where appropriate in this report. These insights must be treated as anecdotal evidence. Further in-depth study is in order to assess the frequency of occurrence of the concerns raised, and the degree to which the concern can be addressed by Caltrans alone or requires broader concerted action by Caltrans in collaboration with other stakeholders.

Report Details

Background

The Caltrans Office of Civil Rights (OCR) has been and wishes to continue promoting opportunities for Small and Disadvantaged Business Enterprise (SB/DBEs) to participate in state and federal contracts. It is leading several outreach activities for that purpose and customizes its contracts accordingly and in compliance with the State of California laws and regulations and with the Code of Federal Regulations. To inform its decisionmaking related to outreach and contracting Caltrans collects supporting data inhouse, among other things, and it engages third-party consultants to conduct disparity studies on a regular basis. Despite OCR's efforts to expand the pool of disadvantaged and small businesses, the perception is that too many businesses still face obstacles and as a result do not make it through the bid process.

A strategic management goal of the OCR is to increase the amount of business awarded to SB/DBEs. To better achieve this goal, OCR seeks to know why SB/DBEs are failing to make it through the Caltrans procurement and contracting process and how it can increase and enhance its engagement with SB/DBEs to increase their success as prime- or subcontractors on Caltrans projects. Caltrans therefore requested that the Institute for Transportation Studies conduct this Preliminary Investigation.

Objectives of Preliminary Investigation

The objectives of this Preliminary Investigation are twofold: (1) to identify the challenges, causes, and reasons for failure of SB/DBEs to be successful bidders and serve as prime- or subcontractors on Caltrans projects or as Caltrans service providers and, accordingly, (2) to recommend means for Caltrans to further foster and develop the requisite capabilities for SB/DBEs to be successful as bidders and contractors (e.g., through training, workshops, education, or outreach forums to augment or replace Caltrans' already extensive efforts in this regard).

Methodology of Preliminary Investigation

The methodology followed to conduct this Preliminary Investigation was for the authors to review documents available from a variety of sources. They obtained documents by using online searches, by searching library databases, as well as by requesting documents from Caltrans. The authors' review included online publications (e.g., pages posted on the Caltrans website, the US DOT website, as well as websites from other federal government agencies), the professional literature (e.g., reports of the FHWA and the TRB), as well as academic journals (e.g., peer-reviewed papers in journals of the American Society of Civil Engineers) on the subject of SB/DBEs. It also included viewing youtube.com postings by Caltrans and one author attended the June 21, 2022 DBE Summit hosted by Caltrans.

The authors then revisited SB/DBE legal requirements and information pertaining to Caltrans SB/DBE practices. They examined qualitative and quantitative data included in disparity studies

conducted periodically by consultants on behalf of Caltrans as well as other documents requested and obtained from Caltrans (e.g., documents describing outreach efforts).

In addition, the authors conducted a number of one-on-one in-depth telephone interviews (about 30 minutes each) with a multitude of stakeholders in various SB/DBEs processes. The objective was to hear concerns and elicit suggestions of opportunities to enhance existing Caltrans practices. Stakeholders interviewed included selected Caltrans personnel, industry consultants, personnel of SB/DBE enterprises, and personnel of general contracting firms who serve as prime contractors on Caltrans projects and subcontract with SB/DBEs. Finally, the authors compiled this Preliminary Investigation document and shared a draft of it with selected stakeholders who had during the interview process expressed interest in offering feedback. The authors then incorporated their feedback prior to finalizing the document.

What are Small and Disadvantaged Business Enterprises (SB/DBEs)?

DBE Regulations

The US DOT established the SB/DBE program under the 1983 “Surface Transportation Assistance Act” (STAA 1983) in order to provide an equal opportunity for companies whose owner(s) would normally be at a disadvantage and to ensure nondiscrimination for SB/DBEs. Congress has since reauthorized the SB/DBE program several times since its inception, most recently in 2021 in the “Infrastructure Investment and Jobs Act” (IIJA) (IIJA 2021, US DOT 2022).

This document focuses on Caltrans engagement with SB/DBEs as defined for this US DOT program at the federal level by the Code of Federal Regulations (CFR) *Title 49 - Transportation, Subtitle A - Office of the Secretary of Transportation, Part 26 Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs* (CFR Title 49 Part 26 (2022)).

Objectives of DBE Regulations

The aim of this federal regulation is to achieve eight objectives:

1. “To ensure nondiscrimination in the award and administration of DOT-assisted contracts in the Department’s highway, transit, and airport financial assistance programs;
2. To create a level playing field on which DBEs can compete fairly for DOT-assisted contracts;
3. To ensure that the Department’s DBE program is narrowly tailored in accordance with applicable law;
4. To ensure that only firms that fully meet this part’s eligibility standards are permitted to participate as DBEs;
5. To help remove barriers to the participation of DBEs in DOT-assisted contracts;
6. To promote the use of DBEs in all types of federally-assisted contracts and procurement activities conducted by recipients.
7. To assist the development of firms that can compete successfully in the marketplace outside the DBE program; and
8. To provide appropriate flexibility to recipients of Federal financial assistance in establishing and providing opportunities for DBEs.”

(1 through 8 are quoted from <https://www.ecfr.gov/current/title-49/subtitle-A/part-26#26.1>)

On projects where Caltrans receives federal funding, it must comply with these federal regulations until all such funds have been expended.

In addition, following the 2005 ruling of the 9th Circuit court on the “Western States Paving vs Washington State Department of Transportation (WS DOT)” case (Western States Paving vs WS DOT 2005-05-09), “[i]f the evidence of discrimination and its effects pertains to some, but not all, of the groups that Part 26 presumes to be socially and economically disadvantaged, then these race- and gender-conscious goals should apply only to the group or groups for which the evidence is adequate.” To address this legal requirement to provide evidence to inform goal setting, Caltrans has engaged with consultants to conduct disparity studies.

Opportunities and Challenges for SB/DBEs

SB/DBE Enterprise Development Phases

Figure 1 depicts key phases a SB/DBE enterprise needs to go through to succeed in being awarded and executing a Caltrans contract. These phases are described next. The description refers to many—though certainly not all—hurdles SB/DBEs are likely to encounter along the way. To help lower several of these hurdles if not altogether remove them, Caltrans already has many initiatives underway. Several of these will be highlighted later.



Figure 1: SB/DBE enterprise development phases leading to successful Caltrans contract award

1. Establish New Company
 - a. Management capability
 - b. Technical knowledge and know-how
 - i. Technical personnel
 - ii. Equipment
 - iii. Craft personnel
 - c. Startup capital and working capital
 - d. Insurance and bonding
2. Obtain SB/DBE Certification
 - a. Information needed
 - b. Application and auditing process
3. Bid on Caltrans Work
 - a. Marketing
 - b. Bidding
4. Get Awarded Caltrans Contract
5. Successfully Execute Contract

Establish New Company

Hurdles encountered when establishing a new company pertain to the need for the company (i.e., the founders) to have adequate management capability and business acumen, and to have or be able to onboard personnel with technical knowledge and know-how in the desired area of specialization. For that, they compete with companies in the marketplace at large, including larger companies that could be prime contractors. DBEs appear to be focused on certain scopes of Caltrans work (e.g., placing rebar, underground utilities, metal guard rail, electrical work, striping, trucking). These scopes complement to some degree, rather than overlap with-, the scope of work prime contractors prefer to self-perform as their bread-and-butter (e.g., excavation, falsework, concrete).

Founders must ensure that, in addition to having the right personnel, they have access to the needed equipment (owned, leased, or rented) and line up the appropriate materials supply chains.

Furthermore, new companies tend to lack the financial wherewithal to pay for the up-front costs of doing business and they are short on capital to advance funds to procure and pay for what is needed to deliver on contract work while waiting for invoices to be paid. Related, without a credit history and established reputation, they face challenges in getting favorable terms with banks for loans, sureties for bonding, and insurance companies for insurance.

Obtain SB/DBE Certification

Hurdles encountered when applying for SB/DBE certification include first learning about the certification opportunity itself and the application process associated with it, then deciding to apply, collecting all requisite data to submit a complete application package, and persisting through the process of review, auditing, etc. Besides demanding that the applicant invests a considerable amount of time to collect data and complete the application package, the application process also costs money (e.g., notary costs).

Bid on Caltrans Work

Hurdles encountered when bidding on Caltrans work relate to engaging with prime contractors (Primes) and to identifying work scopes of specific interest on projects among those publicly advertised by Caltrans.

On one hand, Primes reach out to DBEs to ask for bid proposals to cover “commercially useful functions” (see section later in this document). To identify DBEs, they may search the California Unified Certification Program (CUCP) Database of Certified DBE Firms (see section later in this document) or use their own in-house system for identifying potential subcontractors and tracking DBEs they have worked with previously.

Primes may ask the DBE to bid on a specific scope of work or leave it up to the DBE to specify what they want to take on. The scope may be work that the Prime cannot or prefers to not self-perform although DBEs may be asked bid on work that the Prime can self-perform. Primes account in their project risk management plan for the facts that DBEs are—by definition—relatively small firms, and that some may be relatively new in the marketplace.

Primes document their process of trying to obtain DBE bids. Some rely on third-party consultants to assist with outreach to DBEs and to handle that documentation process. Should a Prime be unable to get a suitable and desirable bid from a DBE to include in their submission, then this documentation can demonstrate “good faith effort.” Caltrans personnel may acknowledge- and

based on their judgment accept a good faith effort from an apparent low bidder in lieu of a Prime's subcontracting with a DBE to meet the contractually specified DBE target.

On the other hand, DBEs themselves may market themselves to prime contractors. Some Primes and DBEs have long-standing working relationships. The existence of such working relationships is but one of several reasons why subcontractors may provide different bids to different Primes for the same scope on a given project.

It is not surprising that some DBEs get frustrated when they are repeatedly asked by the same company to submit a bid although they have never been selected by that company to perform any work.

With this one-to-many relationship between a DBE and Prime contractors all bidding on the same project, the DBE's success rate when calculated as bids awarded/bids submitted will be lower than it would be if that DBE had submitted a bid to only a single Prime since only one Prime can be awarded the contract.

The CUCP Database of Certified DBE Firms may indicate that a DBE operates in a certain geographic region and can perform certain work; however, when asked about bidding on a certain project, they may not meet the need or decline the request. A DBE may choose not to bid on a project for any one or several reasons, such as the lacking capacity to prepare a bid, anticipating having sufficient work based on other bids already submitted or awarded, or waiting for other projects possibly within a more preferred operating range and with a more preferred scope. Other reasons are that the data in the database may reflect a region where the DBE wishes to work in the future but is not yet working at a given point in time, or the data entry being incorrect.

Service providers to Caltrans face similar challenges. In addition, interviewees working for such companies mentioned that they have long-standing working relationships with DBEs. When a service provider wants to have inhouse capability for a certain scope of work a DBE performs, the DBE may be acquired or their firm may merge with them in some other way. As a result, when doing the same work but now part of a larger company, that work would no longer count towards a Caltrans DBE goal. Along the same line, when a DBE graduates from the program, the regional capacity of available DBEs to serve on Caltrans projects will also diminish. The pool of DBEs then must be increased for service providers as well as Primes to be able to meet DBE goals.

Get Awarded Caltrans Contract

Hurdles encountered upon award of Caltrans work stem from the bidding process itself and the ability of the DBE to handle multiple projects or relatively large projects. It is typical for Primes to wait until the very last minute to decide which subcontractors and which subcontracted scope to include in their bid submission to Caltrans. DBEs may be submitting bids for several projects in any given week, and they won't know which projects they are selected for until weeks later. The variability in the rate of success makes it challenging for any DBE to ensure that they will be able to mobilize the capacity needed to do the work when needed. The challenge is greater for DBEs than it is for larger companies: because DBEs are small, they have fewer resources available to pool across multiple projects in order to absorb such variability. DBEs may also find it difficult to find qualified subcontractors that could handle excess workloads, especially those workloads designated as counting toward meeting DBE goals.

Successfully Execute Contract

Hurdles encountered when executing a contract relate to several of the hurdles previously mentioned. They include the DBE's ability to ensure the proper capacity at the time needed to execute the work relative to other project commitments. When this cannot be ensured, a DBE may not be able to perform and be removed from the project, forcing the prime contractor on short notice to make a new good faith effort toward replacing them with another DBE and obtaining approval for doing so.

Another hurdle during execution is to comply with contract terms and conditions, and duly account for- as well as verify what meets the DBE goals so that Primes and DBEs will avoid sanctions due to non-compliance.

In light of these opportunities and challenges for SB/DBEs, the sections that follow highlight several Caltrans practices and initiatives.

Goal Setting

Caltrans Method for Goal Setting

CFR Title 49 Part 26 Subpart C states that a funding recipient is required to submit an overall goal for DBE participation (as a Dollar-percentage of anticipated expenditures on DOT-assisted contracts) and spell out its goal setting methodology on a three-year cycle. Given that the overall goal applies each year during the three-year cycle, a funding recipient must conduct an annual review and make periodic adjustments to goals when the current target is not achieved. For example, when FFY 2019-2021 goals were not met in May 2021, Caltrans responded by optimizing its subcontracting opportunities in Engineering Support (Barros 2021-06-28).

CFR Title 49 §26.45 presents a list of possible methods a funding recipient may use to determine their overall goal for DBE participation in their DOT-assisted contracts. That list is not exclusive but the "overall goal must be based on demonstrable evidence of the availability of ready, willing, and able BDEs relative to all businesses ready, willing, and able to participate in [the funding recipient's] contracts (hereafter, the relative availability of DBEs)" (§26.45 (b))."

Goal setting is a two-step process: (1) compute a base number based on relative availability of DBEs and (2) determine if an adjustment to the base number is needed based on examination of all evidence available in one's jurisdiction. Caltrans establishes its DBE contract goals using a calculation for each project based on subcontracting opportunities and DBE availability, and it includes a factor to account for an abundance of DBE firms (Barros 2021-06-28).

Disparity Studies

Caltrans contracts with third-party consultants to conduct disparity studies on a periodic basis to determine whether and which—if any—barriers to contracting with Caltrans exist for minority- and woman-owned businesses (<https://dot.ca.gov/programs/civil-rights/disparity-study> visited 2022-07-26, BBC Research & Consulting 2007, 2012, 2017, 2021). The consultant team: (1) conducts community meetings, (2) works with Caltrans to collect data on contracts and procurement practices, (3) analyzes the data, (4) conducts availability surveys, and (5) conducts in-depth interviews in local marketplaces (<https://dot.ca.gov/programs/civil-rights/disparity-study>). Based on the resulting qualitative and quantitative disparity study data, Caltrans then determines if

sufficient reason exists for setting SB/DBE contracting goals and if so, *narrowly* tailors any remedies to implement (the terms in italics here refer to legal language specific to the 9th Circuit court ruling). The practice of conducting disparity studies is also common among state and local agencies across the US (DOJ 2021 cites many such studies).

“The core purpose of the disparity study will be to examine whether there are any disparities between: (1) The percentage of contract dollars Caltrans spent with minority- and woman-owned businesses during the study period (utilization); and (2) The percentage of contract dollars that minority- and woman-owned businesses might be expected to receive based on their availability to perform specific types and sizes of Caltrans contracts (availability). The study will also examine other qualitative and quantitative information” (Caltrans 2022c).

Goals, not Quotas

DBE goals are not quotas (CFR Title 49 §26.41 and §26.43). Rather, when a project has a DBE goal, prime contractors bidding on the work must make “good faith efforts” to attain it. If the low bidder can demonstrate good faith efforts through records of advertising, solicitation of DBE bids, outreach and other means listed in the regulations, the project can still be awarded to them even when, as the low bidder, they did not achieve the DBE participation goal. The determination of what constitutes a good faith effort is made by Caltrans personnel.

In the current context, prime contractors are challenged in meeting what they perceive to be high DBE-goal targets. Their bid protests reflect differences in interpretations of scopes of work Caltrans will or will not account for as DBE work, and what constitutes meeting a target versus putting in a good-faith effort. The bid proposal and contract language appear to be ambiguous in stating Caltrans’ expectations regarding DBE involvement and in stating how Caltrans will assess how those expectations are met.

For Federal Fiscal Years 2019-2021, Caltrans’ overall DBE goal was 17.6%. As of May 31, 2021, its year-to-date DBE commitment at award was 15.2% and thus fell short of the State goal. Barros (2021-06-28) described how Caltrans would take corrective action by making mid-year adjustments.

Caltrans’ Federal Highway Administration Program (FHWA) DBE goal for Federal Fiscal Years (FFYs) 2022-2024 is 22.2% (Caltrans 2021). The goal is expected to be achieved in proportions of 18.3 % Race-Gender Conscious Measures and 3.9% Race-Gender Neutral Measures. Also, Caltrans’ Federal Transit Administration (FTA) DBE goal for FFYs 2019-2022 is 4.6%. The FTA DBE goal is expected to be achieved in proportions of 0.2 % Race-Gender Conscious Measures and 4.4% Race-Gender Neutral Measures.

Caltrans’ SB/DBEs goals have been increasing over the years. That there should be a need to continuously increase goals is paradoxical, in a way, because the ultimate reason for setting SB/DBEs targets is to reduce disparities, so long-term success in this regard would mean that no one is disadvantaged and therefore goal setting no longer is needed.

Goal Attainment

Good Faith Efforts & Commercially Useful Function (CUF)

Prime contractors must put in a “good faith effort” to try to meet a project’s DBE goal and may be denied award of a contract if they fail to meet such a goal (CFR Title 49 §26.53). It is up to Caltrans

to make the judgement call when assessing the adequacy of a bidder's good faith effort (CFR Title 49 Part 26 Appendix A provides some guidance in that regard).

Prime contractors are challenged in meeting what they perceive to be high DBE targets, not only for service-type DBE businesses but especially for DBEs capable of building work. Interviewees suggested that Caltrans DBE goals could be better than they currently are incrementally reduced with contract size and tailored to the DBE capacity in the market, using as a metric to gauge the market the DBEs that are actively participating in it, not all that can be identified in the California Unified Certification Program (CUCP) Database of Certified DBE Firms (see later section).

Prime contractors express frustration when not being awarded a contract due to perceived inconsistencies in Caltrans' judgment calls. Their bid protests illustrate where they see differences in interpretations of scopes of work and commercially useful functions Caltrans will account for or not, and of what constitutes meeting a target versus putting in a good-faith effort. They also see a risk of being disqualified if a DBE subcontractor has the wrong codes. Consequently, they may fall into a pattern of using only DBE subcontractors they have worked with in the past, relying on knowing their capabilities, knowledge, and compliance with requirements. This can put newcomers into the DBE program at a disadvantage.

A reduction in the amount of potential ambiguity in contracting practices and enforcement (including, for example, the use of specific NAICS codes), would benefit all bidders and DBEs involved as well as Caltrans.

Prime contractors interviewed also suggested that Caltrans consider a type of 'best value' procurement, e.g., possibly using a two-price option: one that provides a certain level of DBE participation and a price, and a second that provides a higher level of DBE participation but at a higher price.

As is the case for Prime contractors bidding on projects, professional services firms face similar challenges in meeting DBE goals, although there are differences. Professional services firms submit proposals that include their DBE commitment and are selected by Caltrans based on their qualifications. When issued task orders, they must try to cover the scope at hand by hiring qualified DBEs task by task, so percentage-wise DBE engagement can vary significantly from one task to another. Their objective is to meet the goal set by Caltrans on a cumulative basis for the overall scope of work in their contract.

DBE Scopes of Work

DBEs perform only certain scopes of work. Based on how Caltrans specifies a certain project's DBE goals and given the nature of regional disparities, a given DBE's work may count towards such a goal in one geographic region, but not in another geographic region.

Due to their small size, many SB/DBEs can perform only very limited scopes of work on Caltrans projects. Several Prime contractors have expressed that they prefer working with subcontractors that can perform more than one type of work.

California Unified Certification Program (CUCP) Database of Certified DBE Firms

According to CFR Title 49 Part 26 Subpart E, "You [Caltrans] and all other DOT recipients in your state must participate in a Unified Certification Program (UCP)." CFR Title 49 §26.81 spells out the requirements for Unified Certification Programs. The UCP is to "provide 'one-stop shopping'

to applicants for certification, such that an applicant is required to apply only once for a DBE certification that will be honored by all recipients in the state.”

Caltrans manages the UCP database of DBE-certified enterprises in the State of California, referred to as the DBE System (<https://caltrans.dbesystem.com/>). This database is augmented and kept up to date by Caltrans and other certifying organizations as well as by SB/DBE-certified enterprises themselves. It is of utmost importance that the data in this DBE System be as accurate as possible because it is used by firms wishing to do business on DOT-assisted projects to find SB/DBEs for work they seek to contract out.

Several stakeholders interviewed by the authors expressed frustration with the inadequacy of the data in the DBE System in several regards: (1) Only a small fraction of the enterprises in the database (very roughly estimated at 5-10% of the 5,700-or-so records in the System) are in fact potential contractors for DOT-assisted project work. That is, the database includes numerous other DBEs that provide services not directly pertinent to such work or not interested in bidding on such work. The pool of ready, willing, and able DBEs is relatively small. (The recognition that a larger pool is desirable likely was a reason why this Preliminary Investigation was requested.) (2) Interviewees expressed concern with database records suggesting a regional availability of a DBE (or a DBE’s desire to work in a certain region) specified by County and District where, upon inquiry, the DBE would not be available to work in that region. (3) Interviewees expressed concern with database records showing NAICS codes for DBEs that in fact did not realistically reflect the work those DBEs would perform or wish to perform. They mentioned that NAICS codes could not always be matched easily with Caltrans specifications in contract documents.

Undoubtedly, obtaining and maintaining high-quality data in the DBE System is a challenge not in the least because multiple agencies each provide certification programs, many firms provide detailed company information to be included in the System, and each certifying agency must make the appropriate designations. For example, in regard to the use of NAICS codes, CFR 49 §26.71 (n)(2) specifies: “Firms and recipients must check carefully to make sure that the NAICS codes cited in a certification are kept up-to-date and accurately reflect work which the UCP has determined the firm’s owners can control. The firm bears the burden of providing detailed company information the certifying agency needs to make an appropriate NAICS code designation.” DBEs may need more encouragement and support to accurately characterize the types of work they can and will do, and the regions they can and will realistically service, and accordingly keep database entries up to date. Certifying agencies may need to verify if the processes they have in place to create and update database records executed in a timely manner.

Based on this input, further research is recommended to identify specific pain points experienced by those who maintain- and by different users of the DBE System. It is recommended that Caltrans perform a process analysis from the perspective of different users of this DBE System in order to identify improvement opportunities.

DBE Fraud and Abuse

The SB/DBE regulation (CFR Title 49 §26.88) grants certifying agencies, such as Caltrans, authority to suspend DBE firms. Dang and Shane (2020) studied the US DOT’s disadvantaged business enterprise program and analyzed DBE fraud and abuse cases from around the US. They found that “the most common DBE fraud schemes include DBE fronts for non-DBE businesses and pass-through schemes” and suggest “improving existing DBE fraud prevention and enhancement mechanisms through the use of combined databases and educating project participants and enforcement personnel with fraud detection and prevention training programs.”

Caltrans Outreach Activities

OCR promotes opportunities for SB/DBEs to participate in state- and federally funded projects. Appendix 1 to this Preliminary Investigation includes two tables with outreach activities that Caltrans is currently engaged in or has been engaged in in recent years; the data as shown was provided by Caltrans.

Among the opportunities OCR has created is the Mentor-Protégé Program. “Initiated by Governor Schwarzenegger via Executive Order S-11-06, this program is designed to encourage and support small businesses through voluntary partnerships with established firms” (Caltrans District 4 2022). This program has been well received by all participants involved and promises to be successful statewide as it is being rolled out across all 12 Caltrans Districts.

With so many outreach activities and work processes having been reimaged out of necessity due to the Covid-19 pandemic, people have been forced to interact virtually rather than in-person. A study is in order to assess any beneficial differences between virtual and in-person events and decide if and to what extent virtual events should be continued to replace or supplement in-person events.

Metrics

Process Metrics and Outcome Metrics

While Caltrans has numerous initiatives underway (see Tables 1 and 2 in Appendix 1), the authors of this Preliminary Investigation did not yet obtain comprehensive data on the metrics Caltrans is using to gauge their initiatives’ success. Some metrics were available on an event-by-event basis (see columns “Metric(s) (if available)” and “Actual success” in Table 2 in Appendix 1) but no multi-year trend data was obtained.

To gauge and manage the execution of an initiative while it is underway, process metrics can be used. By assessing process metrics periodically until the initiative has been completed or a milestone along the way has been reached (e.g., completing an event pertaining to the initiative) corrective actions can be taken to better steer the execution towards achieving the desired target.

In contrast, to gauge the outcome (result or achievement) of an initiative, outcome metrics can be used. When linked together, process metrics and outcome metrics both have a role to play as key performance indicators when aiming for systematic continuous *improvement*. *Shown on dashboards, a visual display of a variety of metrics can be interpreted holistically and allow OCR to make performance trade-offs.*

An example of data Caltrans could start tracking in greater detail, is DBE involvement in each bid received, rather than in only the apparent low bidder and the next two bidder (three bids in total of all bids received). Data of interest would include project specifics, the Prime contractor, the SBE business name, the bid amount, the scope of work (using NAICS coding system), and whether the contract was awarded. Supplemental data collection would include specifics of the execution of the scope of work and payments. For a select number of bidders, some of this data is already being tracked by Caltrans. More comprehensive tracking would allow for more extensive data mining to lead to more insights on how to increase DBE success.

Processing DBE Applications

The authors obtained an example from Caltrans of systematic continuous improvement related to the processing of SB/DBE applications. It is worth detailing here as it exemplifies an approach OCR- and other Caltrans personnel can follow when pursuing other improvement opportunities.

As part of Caltrans' internal Lean Six Sigma program (e.g., Caltrans 2015), Williams (2019) applied Lean Six Sigma (L6 σ) to address the problem of processing DBE applications within the federally mandated 90-day timeline. To clarify, CFR Title 49 §26.83 (k) mandates that "If you are a recipient, you must make decisions on applications for certification within 90 days of receiving from the applicant firm all information required under this part..." and (l) "As a recipient or UCP, you must advise each applicant within 30 days from your receipt of the application whether the application is complete and suitable for evaluation and, if not, what additional information or action is required." That is, the 90-day certification decision timeline begins when the application is complete and suitable for evaluation.

The objective of this study was to "Process each DBE application and action received by the Office of Business and Economic Opportunity (OBEO), per our regulations, within the required timeline, 100% of the time" and this was gauged using as primary metric (Williams 2019 slide 3).

Figure 2 illustrates by means of an initial process map (Williams 2019 slide 3) how personnel in Caltrans perceived the SB/DBE application processing process to be before the study was conducted.

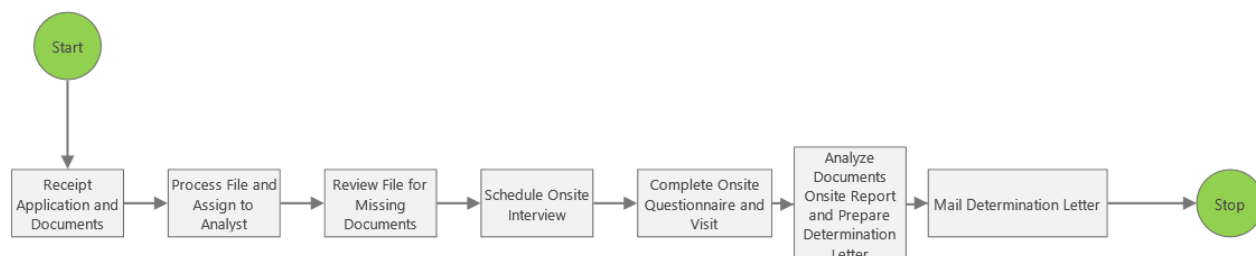


Figure 2: DBE application processing - initial process map (Williams 2019 slide 3)

Without expanding on details of this Lean Six Sigma study of note is that the existing process was found to be much more complex. A new process map was developed in the course of the study (Figure 3 based on Williams 2019 slides 11 and 12). Revealing this complexity allowed for the identification of key process steps for which to Caltrans personnel could collect data, then apply metrics, and use the results to make process improvements.

Figures 4 and 5 demonstrate how data collection and a process capability analysis conducted on the total processing time, followed by appropriate interventions, made it possible to significantly shorten that time and increase its predictability.

The study resulted in formulating the following control plan that can enhance many existing process steps and processes within Caltrans (Williams 2019 slide 16):

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1. Desk Manual
 - 1.1. Training
 - 1.2. Uniformity of the certification process
2. Weekly Reports
 - 2.1. Status of analyst workload
 - 2.2. Track file from initial receipt to the final determination
3. Updated Procedures
 - 3.1. Streamline determination process
 - 3.2. Eliminate unnecessary request to firms and steps by analysts
4. Operating Procedures
 - 4.1. Ensures certification analysts have reference material outlining every aspect of the certification process
 - New checklist (ensure adherence to timelines of CFR Title 49 Part 26)
 - 4.2. New standards for firms
5. White Board
 - 5.1. Track completion of each new DBE application (Excel spreadsheets: Track assignment of new DBE applications, Track progress of analyst, Track onsite scheduling and interviews dates/times, and Track completion time of files)
 - 5.2. Accountability of certification team

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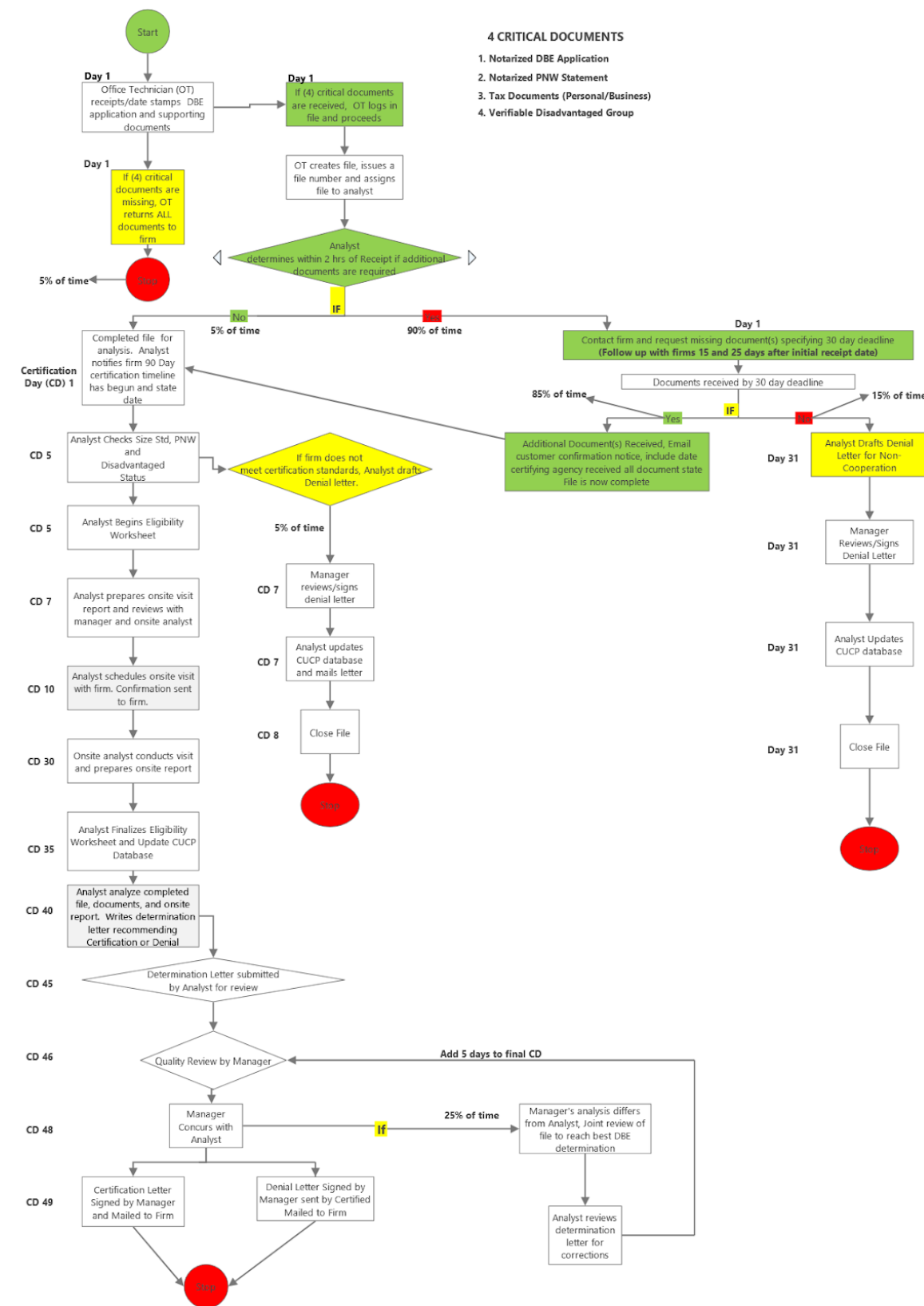


Figure 3: DBE application processing - new process map (Williams 2019 slides 11 and 12)

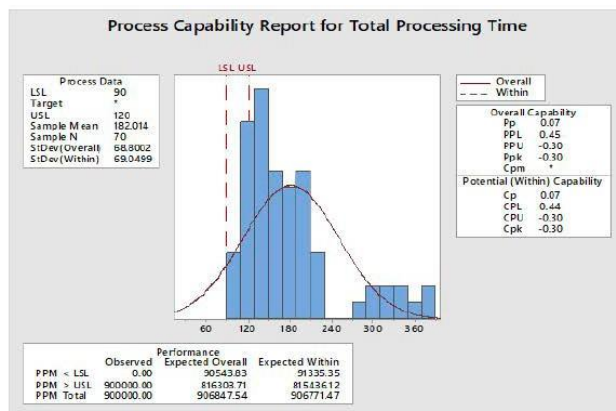


Figure 4: Process capability analysis for total processing time (old) (Williams 2019 slide 14)

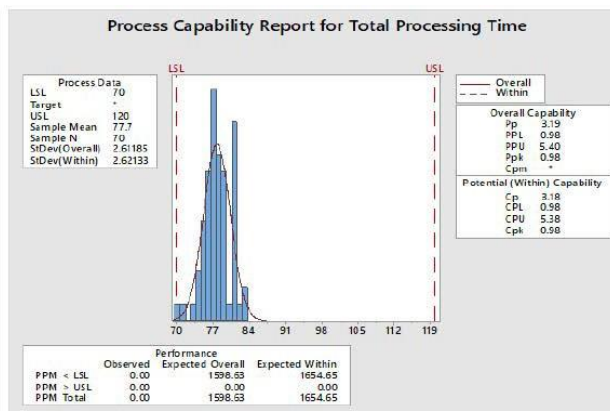


Figure 5: Process capability analysis for total processing time (new) (Williams 2019 slide 15)

The results obtained through the Lean Six Sigma study had the following benefits (Williams 2019 slide 21): (1) Decreased new DBE certification time by more than half. (2) Increased opportunities for new DBE firms to bid on contracts sooner. (3) Maintaining federal compliance guidelines outlined by CFR Title 49 Part 26. (4) Enhanced our customer service relationships with DBE firms. (5) Restored faith in the DBE program with our firms and shareholders. (6) Provide a safe, sustainable, integrated, and efficient transportation system to enhance California’s economy and livability.

Significant benefits can be reaped from conducting process capability studies and tracking process- and outcome metrics. Once Caltrans personnel becomes more familiar with the use of Lean Six Sigma and other methods for systematic documentation, data collection, and data analysis, many more in-house processes and process steps can be studied and improved. The implementation of online systems can further streamline this process. Caltrans will want to consider doing additional studies like these to inform and sustain improvements.

Findings and Recommendations

Caltrans has many excellent initiatives underway as needed to meet the US DOT’s legal requirements pertaining to CFR Title 49 Part 26 but also because of individual concern and commitment of personnel within OCR and the Caltrans organization at large to address civil rights. Given that Caltrans has so many initiatives already underway—put simply: it is already doing more-or-less everything it can—the findings and recommendations presented next pertain mainly to refining, improving, and more broadly adopting those practices. Any new practices that can be identified should, of course, also be considered for adoption and implementation.

Based on the findings of this Preliminary Investigation, it is recommended that OCR address the following, interrelated considerations (in no specific order):

1. California Unified Certification Program (CUCP) DBE System

Caltrans manages the database of SB/DBE-certified enterprises in the State of California, referred to as the DBE System (<https://caltrans.dbesystem.com/>). This database is augmented and kept up-to-date by Caltrans and other certifying organizations as well as by SB/DBE-certified enterprises themselves. It is of utmost importance that the data in this DBE System be as accurate

as possible because it is used by firms doing business with Caltrans to find SB/DBEs for work they seek to contract out.

Several stakeholders interviewed by the authors expressed frustration with the inadequacy of the DBE System. Based on this input, further research is recommended to identify specific pain points experienced by those who maintain- and by different users of the DBE System. *It is recommended that Caltrans perform a process analysis from the perspective of different users of this DBE System in order to identify improvement opportunities.*

2. Process Improvement

Caltrans in-house processes include SB/DBE outreach, certification application review and approval, bid proposal assessment and contract award, tracking of DBE contract amounts on projects, DBE System maintenance, etc. The implementation of in-house processes is done at the Caltrans District level, but there appear to be different levels of implementation maturity across Districts. *It is recommended that OCR track and verify that SB/DBE-related best practices within Caltrans (e.g., the Protégé Program), to the extent they are applicable, are promoted and implemented consistently across all 12 Caltrans Districts.*

For certification application review and approval, Caltrans already has conducted a Lean Six Sigma study which led to significant improvements in the overall process and individual process steps. *It is recommended that OCR conduct similar studies for other processes as well, on topics judiciously selected to benefit both Caltrans- as well as non-Caltrans personnel, and track the data not only during the study but on an on-going basis after the study itself has been completed.*

With so many work processes having been reimaged out of necessity due to the Covid-19 pandemic, people have been forced to interact more virtually rather than in-person. *It is recommended that OCR assess any beneficial differences between virtual and in-person events and decide if and to what extent virtual events should be continued to replace or supplement in-person events.*

3. Expectation Management and Contract Specifics

Caltrans has been responsible and ambitious in its goal setting for SB/DBEs contract amounts. Increasingly ambitious targets are increasingly difficult to meet. Continuously increasing goals is paradoxical, in a way, because the ultimate reason for setting SB/DBEs targets is to reduce disparities, so success in this regard would mean that goal setting no longer is needed.

In the current context, Prime contractors are challenged in meeting what they perceive to be high targets and bid protests reflect differences in interpretations of scopes of work Caltrans will account for or not, and what constitutes meeting a target versus putting in a good-faith effort. *It is recommended that OCR further strive to reduce the amount of potential ambiguity in its contracting practices when (1) spelling out SB/DBE goals for a specific project (incl. using specific NAICS codes), and (2) assessing whether an apparent low bidder has indeed met those goals.*

4. Tracking

Caltrans obtains and has access to extensive data that, if resources can be dedicated to capturing it cogently, could inform its decisionmaking. For example, Caltrans' current practice is to record DBE-related specifics pertaining the apparent low bidder and the next two bidders, that is, three bids in total of all bids received. If these specifics were tracked for all bids received, the data set would be richer and more informative when analyzed, and accordingly could better inform improvements to Caltrans' SB/DBE-related initiatives. *It is recommended that Caltrans invest in*

more comprehensive tracking of data it can capture, such as data of SB/DBEs that are listed in bid proposals submitted by Prime contractors, to better tailor its decisionmaking.

5. Metrics

Related to process improvement, the authors of this Preliminary Investigation obtained data related to OCR meeting CFR Title 49 Part 26 requirements of its SB/DBE program (meeting reporting requirements), however they did not have time to inquire about metrics OCR is using in-house to gauge success in reaching the goals it sets out to meet. *It is recommended that OCR develop new—if not already available—performance metrics (process metrics and outcome metrics) so that it can systematically collect data to track SB/DBE enterprise engagement and performance over time, as well as gauge success and improvement opportunities of initiatives OCR has underway. Furthermore, it is recommended that Caltrans develop dashboards to visually display a variety of metrics so they can be interpreted holistically and allow OCR to make performance trade-offs.*

6. Leveraging Resources across Organizations

It is recommended that Caltrans further engage with third-party organizations that may be able to create support arrangements to get DBEs started until they become self-sustaining (e.g., including financial institutions that can provide working capital and bonding, or incentives for Prime contractors to provide such support).

7. Learning from Best Practices of other Government and Private Organizations

Caltrans already has good working relationships to exchange ideas and leverage resources with other government- and private organizations that have SB/DBE initiatives underway. As practices evolve, contexts change, more lessons are learned, and more publications on the subject become available, *it is recommended that Caltrans invest in follow-on research to conduct an in-depth review of new best practices to achieve to SB/DBE success that are used by other government and non-government agencies in the State of California and in other states.*

An in-depth review would include publications cited in this Preliminary Investigation, other publications listed in this document's section with Bibliography and References, and any additional publications available. Such a review can reveal new practices or subtleties and refinements of practices in use by others that are of potential value to Caltrans.

Acknowledgments

The authors are grateful for the assistance received to conduct this Preliminary Investigation and thank everyone who was involved, especially those who made time to participate in their in-depth interviews. The authors asked and Caltrans kindly suggested a list of people to be interviewed. Many of these and several other people were interviewed. The interviewees represented many different stakeholders: interviewees spoke from the perspective of Caltrans, other California state- and local government agencies, SB/DBE enterprises, businesses that hold prime contracts with Caltrans, and others. Some interviewees asked to remain anonymous and for this reason the authors are not naming anyone specifically in this acknowledgment. All input is much appreciated!

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Appendix 1: Caltrans Outreach Activities

This appendix comprises two tables:

- Table 1 outlines DBE outreach opportunities that are currently offered by Caltrans OCR and partnering agencies. Additionally, it contains past outreach opportunities from fiscal year 2020-21.
- Table 2 outlines existing and past SB/DBE outreach opportunities that are offered by the twelve Caltrans Districts and partnering agencies.

The authors of this Preliminary Investigation obtained the data shown in these two tables upon their request from Mr. Sanjay Singh at Caltrans OCR (Reference marked by “Task #”) and supplemented it to some extent by their own research into events using online searches. The Preliminary Investigation did not aim to develop a complete inventory of all initiatives Caltrans has undertaken.

Table 1: Caltrans outreach activities

Name of Initiative	Agency	Year(s) active	Scope	Reference
Increased coordination and alignment of District Small Business Liaisons (DSBLs)	Caltrans OCR	2020-21	“This partnership includes statewide focus of outreach, trainings and metrics; progressing efforts on equity and inclusion-centered activities; and a renewed emphasis on improved customer experience.”	Task 4_1_2 & Task 5 pg. 3, https://dot.ca.gov/programs/civil-rights/dsbl-contact-list
Miscellaneous virtual event hosting	Caltrans OCR	2020-21	Regional and statewide events, broad subject matter	Task 4_1_2 & Task 5 pg. 3
1:1 meetings	Caltrans OCR	2020-21	Connecting with both DBE and potential DBE firms for technical/personal assistance, counseling, and advocacy	Task 4_1_2 & Task 5 pg. 3
“Small Business Only” Minor-B Contract Policy	Caltrans OCR & Division of Procurement and Contracts	2020-present	Focus public works contract solicitations for only small businesses. “As recent as February 7, 2022, the Minor B Contract Policy defines awards of under \$388,000 to small businesses only.”	Task 4_1_2 & Task 5 pg. 3-4
Revision to Emergency Contract Policy Guidance	Caltrans OCR & Maintenance and Construction Division§	2020-21	When services/goods are needed to respond to “a sudden, unexpected occurrence that poses a clear and imminent danger requiring immediate action to prevent or mitigate the loss or impairment of life, health, property, or essential public services,” district contract managers are directed to actively seek small businesses to participate	Task 4_1_2 & Task 5 pg. 4

Name of Initiative	Agency	Year(s) active	Scope	Reference
			in non-IT and non-A&E emergency contracting opportunities.	
SB/DBE Outreach	Caltrans OCR	2022-23	<p>Will be identifying, recruiting, and certifying up to 300 additional firms that have the desire and potential to work on Caltrans highway construction projects. Doing so by investing \$1.25 million into a grassroots identification effort over the next 12 months.</p> <p>METRIC: Target of 300 new firms</p>	Task 4_1_2 & Task 5 pg. 4
Targeted outreach and advertising	Caltrans OCR	2022-24	<p>-Increase advertising in publications targeting racial and ethnic minorities, LGBTQ+, and economically-disadvantaged individuals. Annual amount increasing from \$19,000 to \$388,000 by FY 2023-24.</p> <p>-Includes: "12 African American publications with 200 ad runs totaling \$196,272.04" and "6 Hispanic publications with 126 ad runs totaling \$100,016.00."</p>	Task 4_1_2 & Task 5 pg. 4-5
Project-Specific Small Business Goal Setting pilot program	Caltrans OCR, Caltrans Small Business Council (Including Mr. Fred Jordan and Mr. Gene Hale)	2022-23	Setting small business goals of at least 12% for both professional and engineering services on projects to increase participation of small businesses. These goals are in place on 10 projects across four Caltrans districts (all between \$3-7 million).	Task 4_1_2 & Task 5 pg. 5
Expansion of Mentor Protégé Program	Caltrans OCR (including special coordination with District 4)	2022-present	This program connects small and disadvantaged firms with established firms for mentorship and support. This is already well established in District 4 (Bay Area) and is expanding to areas including LA, San Diego, and Fresno).	Task 4_1_2 & Task 5 pg. 5, District 4 program (https://dot.ca.gov/caltrans-near-me/district-4/d4-programs/d4-calmentor)
Industry Engagement	Caltrans OCR	?-present	<p>- "Caltrans Office of Civil Rights hosts quarterly outreach meetings with construction industry leaders including AGC, UCON, ACEC to develop strategies to improve utilization of all DBEs, particularly African American and Hispanics (the two underutilized groups)."</p> <p>- "Ongoing consultations with members of the Caltrans Small Business Council, including the California Black</p>	Task 4_1_2 & Task 5 pg. 5-6

Name of Initiative	Agency	Year(s) active	Scope	Reference
			Chamber of Commerce, Black Business Association, the SF Black Chamber of Commerce, Cal Asian Chamber, and California Hispanic Chamber of Commerce.” -”Regular consultations with advocates including California Black Media, and the African American Community Economic Council.”	
Paving Your Road to Success with Caltrans	Caltrans OCR	2022	10 presentations (one each week) from January 26 to March 30, 2022. METRIC: 38% attendance achieved from the first 3 meetings (231 attendees out of 568 registrations)	Task 4_1_2 & Task 5 pg. 6 Paving Your Road to Success (https://drive.google.com/file/d/1JioHo_KiYp4chTkgyISLPzy_aZs0-Kyu/view?usp=sharing) Caltrans (2022) Paving Your Road to Success with Caltrans Flyer
Disadvantaged Business Enterprise (DBE) Summit	Caltrans OCR	2021-2022	Will encourage DBEs and firms that are eligible to become DBEs, giving them tools on certification, networking, accessing capital, and financial/bonding information. Taking place in the Greater Los Angeles area	Task 4_1_2 & Task 5 pg. 6
DBE Policy and Program Collaboration	Caltrans OCR	?-present	Participation by African American firm representatives on multiple Caltrans sponsored committees, such as the Statewide Small Business Council and the African American DBE Participation Ad Hoc Working Group.	Task 4_1_2 & Task 5 pg. 6
Calmentor	Caltrans OCR	?-present	“The mission of the Calmentor Program is to increase the pool of small firms participating in transportation projects by providing them opportunities to network and partner with larger, established firms.”	Memorandum of Understanding, 2021 Mentor List, 2021 Protégé List
Caltrans Statewide 2 nd Annual DBE Summit	Caltrans & partnering agencies	2021-2022	Aimed at certified DBE firms and firms looking to become DBE certified, designed to provide insight on the Caltrans contracting processes and to identify barriers to DBE achievement	Registration page for this Summit

Table 2: Caltrans District-level SB/DBE outreach activities

Name of Initiative	Agency/Organizers	Year(s) active	Scope	Metric(s) (if available)	Actual success	Reference
DISTRICT 1						
Outreach for Humboldt County Projects	District 1, Humboldt County Project Managers	? - present	Quarterly local agency project outreach meeting, providing public contract information to prospective subcontractors.	(1) Number of participants, (2) Number of people invited (reach of mailing list), (3) Anyone who already has contract(s) with Caltrans,	18 attendees representing 15 firms (no data about attendance-to-invite ratio)	Task 4_1_2 & Task 5 p. 15
Caltrans' North Coast Tribal Summit	District 1, Tribal Employment Rights Office	?	Presented SB and DBE certification information to Native American tribes within District 1 and the benefits that DBE certification would have on subcontracting opportunities near to or on their lands			Task 4_1_2 & Task 5 p. 15
Mandatory pre-bid meetings	District 1	2020	Held the first mandatory pre-bid meetings in 7 years, to help firms understand the mitigation, construction and tribal cooperation needed.		18 attendees (no data about firms that were unable to attend but wanted to, also no discussion about hosting these virtually)	Task 4_1_2 & Task 5 p. 15
1:1 meetings	District 1		Held sessions with certified and prospective SBs and DBEs to give personal assistance and inform them better about working with Caltrans and the benefits that come with it.	(1) Number of meetings	70 meetings	Task 4_1_2 & Task 5 p. 15

Name of Initiative	Agency/Organizers	Year(s) active	Scope	Metric(s) (if available)	Actual success	Reference
Meet the Primes (EVENT A)	District 1, District 2, District 3, Caltrans OCR, Caltrans Architectural & Engineering Contracts	2020	Space for firms to learn directly from prime contractors, be exposed to things like the Calmentor program and application, and hear from Caltrans contacts.		51 attendees (32 engineering, 19 architectural)	Task 4_1_2 & Task 5 p. 15 https://dot.ca.gov/-/media/dot-media/district-3/documents/calmentor/meet-the-primes-ae-a11y.pdf
DISTRICT 2						
Same as EVENT A						Task 4_1_2 & Task 5 p. 18, https://dot.ca.gov/-/media/dot-media/district-3/documents/calmentor/meet-the-primes-ae-a11y.pdf
DISTRICT 3						
Same as EVENT A						Task 4_1_2 & Task 5 p. 20, https://dot.ca.gov/-/media/dot-media/district-3/documents/calmentor/meet-the-primes-ae-a11y.pdf
1:1 meetings	District 3		Held sessions with certified and prospective SBs and DBEs to give personal assistance and inform them better about working with Caltrans and the benefits that come with it.		4 meetings	Task 4_1_2 & Task 5 p. 20
DISTRICT 4						
Certification Summit	District 4, San Francisco African American Chamber of Commerce (SFAAAC)	October 2019	Provided information to non-certified small businesses about DBE and SB/DVBE certification. Also discussed how to find contracts with Caltrans and other local government entities and transportation agencies.			Task 4_1_2 & Task 5 p. 22
Design Build Elevator	District 4	May 2020	Opportunity for SBs and DBEs to learn about a design build			Task 4_1_2 & Task 5 p. 22

Name of Initiative	Agency/Organizers	Year(s) active	Scope	Metric(s) (if available)	Actual success	Reference
Rehab and Repair pre-RFQ outreach program			elevator rehab project and to connect with members of District 4's Caltrans team.			
DISTRICT 5						
Small Business Webinar Series	District 5, Granite, "multiple state agencies and industry partners"	2020-2021	Multiple webinars including a live DBE certification webinar.			Task 4_1_2 & Task 5 p. 24; Videos available on Caltrans District 5 Youtube channel
Outreach events for Segment 4A of project #05-ON73U4	District 5, CPM Logistics	2020	Designed to provide more information before a bid on project #05-ON73U4.		"Substantial increase in DBE bids" but estimates were ~30% over fair market value	Task 4_1_2 & Task 5 p. 24
1:1 meetings	District 5	2020-2021	Held sessions with potential DBE firms to give personal assistance and inform them better about working with Caltrans and the benefits that come with it.		2 new DBE certifications (no information on how many meetings were had)	Task 4_1_2 & Task 5 p. 24
DISTRICT 6						
Small business government certification workshops	District 6, Kern Women's Business Center	2020-2021	Co-hosted workshops targeting DBEs and potential DBEs to discuss the process and value of certification.			Task 4_1_2 & Task 5 p. 26
CSU Bakersfield Small Business Development	CSU Bakersfield	2003-present	The CSU Bakersfield Small Business Development Center (SBDC) promotes the development, growth and success of small businesses and			CSU Bakersfield SBDC

Name of Initiative	Agency/Organizers	Year(s) active	Scope	Metric(s) (if available)	Actual success	Reference
Center (EVENT B)			aspiring entrepreneurs throughout Kern, Inyo and Mono Counties.			
DISTRICT 7						
Small Business Outreach Program expansion	District 7	2020	Increased presence of the program on social media			Task 4_1_2 & Task 5 p. 28
DISTRICT 8						
District Small Business Program contact list expansion	District 8	2020	Grew small business contact list		11% increase in contact list size compared to 2019 contact list	Task 4_1_2 & Task 5 p. 30
Caltrans contracting and professional services opportunities	District 8	2020	Provided information about these opportunities to 67 of Procurement Technical Assistance Center's small business clients			Task 4_1_2 & Task 5 p. 30
DISTRICT 9						
California Contracting, Acquisition and Procurement Industry Expo presentation	District 9, California Contracting, Acquisition and Procurement Industry Expo	2020	Participated in presentation explaining DBE Certification benefits			Task 4_1_2 & Task 5 p. 31
Same as EVENT B						
DISTRICT 10						
Public and private entity	District 10	2020-2021	Collaborated with partner organizations to organize events			Task 4_1_2 & Task 5 p. 33

Name of Initiative	Agency/Organizers	Year(s) active	Scope	Metric(s) (if available)	Actual success	Reference
networking meetings			and use WebEx virtual meetings to facilitate businesses being able to meet with public and private entities			
DISTRICT 11						
1:1 meetings	District 11	2020	Held sessions with certified and prospective SBs and DBEs to give personal assistance and inform them better about working with Caltrans and the benefits that come with it.		49 meetings	Task 4_1_2 & Task 5 p. 35
On Ramp to Small Business	District 11	2020	Launched Volume 1 and 2 of this new Small Business Program Newsletter			Task 4_1_2 & Task 5 p. 35; Caltrans District 11 Website
Event solicitation streamlining	District 11, PIO	2020	Did more soliciting for upcoming events with PIO and created new webpages to advertise workshops			Task 4_1_2 & Task 5 p. 35
DISTRICT 12						
Information dissemination	District 12	2020	Provided information and resources to 15 DBE owners			Task 4_1_2 & Task 5 p. 37
Establishment of District Small Business email	District 12	2020	Designed to increase timeliness of responses to Small Business Program and DBE inquiries, and to ensure accountability of those responses. Email address: d12smallbusiness@dot.ca.gov			Task 4_1_2 & Task 5 p. 37

Appendix 2: Acronyms

A&E	Architectural and Engineering
ABAG	Association of Bay Area Governments, https://abag.ca.gov/about-abag
ACDBE	Airport Concession Disadvantaged Business Enterprise
ACEC	American Council of Engineering Companies, https://www.acec.org
CUCP	California Unified Certification Program
CUF	Commercially Useful Function
DBE	Disadvantaged Business Enterprise as defined in CFR Title 49 §26.5f
FFY	Federal Fiscal Year
FHWA	Federal Highway Administration, https://highways.dot.gov
L6σ, L6S	Lean Six Sigma, https://dot.ca.gov/-/media/dot-media/programs/risk-strategic-management/documents/mm-2015-q3-lean-6-sigma-a11y.pdf
MBDA	Minority Business Development Agency, ““The US Department of Commerce, [...] MBDA is the only federal agency solely dedicated to the growth and global competitiveness of minority business enterprises. (accessed 2022-07-04)”, https://www.mbda.gov
NAICS	North American Industry Classification System, https://www.census.gov/naics
OCR	Office of Civil Rights
SANDAG	San Diego Association Governments, https://www.sandag.org
SB	Small Business as defined in CFR Title 49 §26.5
SB/DBEs	Small Businesses and Disadvantaged Business Enterprises
SBE	Small Business Enterprise certified by the State of California
SLEB	Small, Local Emerging Business certified by the County of Alameda
TLF	Transportation Lean Forum, https://www.tpm-portal.com/collections/transportation-lean-forum/
VSBE	Very Small Business Enterprise
VSLBE	Very Small and Local Business Enterprise certified by Alameda County Transportation Commission (ACTC)