

SECTION VIII.

Engineering Prime Contracts

Unlike construction prime contracts, Caltrans and other public agencies typically select prime consultants for engineering contracts based on qualifications. This presents a different set of potential barriers to MBE/WBE and small business participation as prime consultants on engineering-related work.

Overview of Solicitation Procedures

With the exception of on-call or emergency agreements, Caltrans typically solicits statements of qualifications (SOQs) for projects overseen within its Consultant Services Division. The process begins with the publication of a request for qualifications. Firms usually have a few weeks to prepare and submit their statements after this announcement.

A panel of contract engineers at the corresponding district office reviews each statement, and the average of the weighted scores from each reviewer gives an overall rating. The three firms with the highest rank comprise a “short list.” These short-listed firms must submit sealed cost proposals and are invited for evaluation interviews, at which time the review panel applies a similar set of weighted scoring criteria. At the close of reviews, the Department selects the top firm, opens that firm’s cost proposal and enters rate negotiations. The contract manager continues down the list if they are unable to agree upon a set of rates with the top firm. The other firms’ cost proposals remain unopened until the Department has selected them for negotiations.

Qualitative Information on Prime Contracting in the Transportation Engineering Industry

The study team’s review of Caltrans’ selection processes and interviews with businesses owners identified a number of barriers to obtaining work as a prime consultant.

Requirements to propose as a prime consultant. Caltrans requires that a firm have the relevant professional licenses to perform engineering-related work. This license requirement is typical of most public sector agencies.

Information on requests for proposals. According to the Division of Procurement and Contracts (DPAC) website, the Department must announce a new request for qualifications (RFQ) via publication in a relevant industry or trade journal with statewide circulation or electronic posting on a site with demonstrated statewide accessibility that is maintained by a professional organization representing firms in the relevant industry. The DPAC site further specifies that the failure of a professional society or trade journal to publish the announcement is not grounds to rescind the contract or re-issue the request.

Interviewees reported that this formal notice procedure is open, but that larger firms know about the project ahead of time due to their marketing efforts. One interviewee indicated that response times are short, so this informal advanced notice helps the larger firms. One interviewee noted that Caltrans posts a “contract look-ahead,” but that it is not very accurate.

Assessment of qualifications when competing for Caltrans work. In contrast to prime contracts for construction projects, where a low bid rule determines the award of contract, Caltrans selects firms for engineering-related contracts based on qualifications. Each firm reports qualifications in a formal statement to the district contract staff; this statement enumerates a firm's previous experience on projects of similar scope and size and contains resumes for key personnel that will manage and assist project execution. The rating scheme used for the criteria, in addition to the size and experience criteria, potentially create barriers for small businesses attempting to successfully bid as a prime contractor. Some contractors also mentioned that proximity to Caltrans offices and familiarity with staff are important for winning contracts.

Criteria and weighting scheme. The determination of a short list of firms for interview is based upon review of these statements for a narrow range of criteria (scores on these criteria are weighted by a factor of 1 to 3, as indicated in parentheses): professional excellence (3), personnel experience and education (2), staffing capability and workload (2), relevance of recent work (2) and feasibility of oversight (1).

Given this weighting scheme, some firm owners said that evaluations favor firms with larger and highly-educated staff and stronger financial resources to manage multiple projects. In reviewing SOQs for past engineering bid opportunities, the study team discerned that higher scores went to firms with better organized and more professional-looking statements.

Short-listed firms are invited for interview, and their conduct and response to these interviews are subject to weighted scoring for (scores on these criteria are weighted by a factor of 1 to 3, as indicated in parentheses): personnel qualifications (2), firm capabilities (3), project understanding and approach (3), feasibility of oversight (1) and the quality of solicited references (1). The study team was unable to determine patterns in this stage of review because numeric score cards were the only remaining record of these oral presentations for the contracts reviewed.

Size and experience requirements. Many firm owners interviewed in the study or who testified at the public hearings indicated a "Catch-22" where firms needed Caltrans experience to be selected as a prime consultant but could not obtain that experience without winning this work. Some interviewees said that it was difficult to get work with Caltrans because district staff likes to work with firms they know. One interviewee reported that small businesses do not have the resources to do the necessary marketing to Caltrans. A minority business owner said that his company has not had success with Caltrans projects, in contrast with other public agencies, because Caltrans has a strong preference for large, internationally prominent firms. He reported a strong bias against smaller local businesses.

One minority firm owner said that their firm usually just works as a subconsultant for Caltrans because Caltrans places a heavy emphasis on the size of the firms it selects, which shut his firm out of prime contracting opportunities. His larger competitors were not only able to get the work, but also to build skills in areas where they previously had no expertise.

A trade association representative said, "The perception is that if you are a smaller firm or a DBE firm, you won't have the horsepower that Caltrans is looking for to take on a lot of these contracts. Even though you may have the right people at the right time, the perception is that if you don't have four times as many people as the contract might need, you're not going to be considered for it."

One interviewee reported that, in the private sector, firms may be selected based on the capabilities and experience of both the company itself and its personnel, but in the public sector, firm experience is the dominant factor. This may make it difficult for small businesses to get the necessary experience that will win it work in the public sector.

Proximity and familiarity. Many owners of engineering firms complained about limited opportunity to win public sector prime contracts in general. Some report that their proposals are not seriously considered because public sector managers are not familiar with their companies or that large firms are favored. Some interviewees reported that staff of public agencies have the misperception that DBE firms are not qualified to do the work.

Other firm owners mentioned that Caltrans sometimes takes the physical proximity of the contractor's office into consideration. As this has little genuine bearing on a firm's qualification for a project, these firms perceived such location requirements as unfairly biased against firms who do not have offices in such places as downtown Oakland or Los Angeles.

Paperwork and administrative requirements. Several firms noted the complexity of the Caltrans selection process and commented on the amount of time required to complete the bidding process. An added difficulty for professional service firms working with Caltrans is the federally-mandated audit of contracts and accounting procedures. This potentially affects the bid and payment process as a firm may go over a year under agreement without any clear indication of how much overhead and profit they might receive for their work.

Negotiated rates. Several firms that have submitted qualification for Caltrans engineering projects in the past reflected their increasing disinterest in bidding due to the standard rates imposed by Caltrans. Some indicated that the standard rates have not kept current with the increased costs for fuel and other materials. Another female business owner questions, "Why would I work on a job for Caltrans at \$64 an hour when I can take the same guy and charge him out at \$95 an hour and work for AT&T." Many other professional service providers shared similar experience in the relative earning potential on Caltrans contracts compared to what they are able to earn in the private sector.

Prompt payment. Very few prime consultants reported negative experiences with receiving accurate and timely payments for invoices submitted to Caltrans. A somewhat common frustration, however, was the close inspection and requests for detailed expenses that often followed the submission of invoices. One firm owner said that Caltrans invoicing staff require every item submitted to be "dotted and crossed."

MBE/WBE Utilization as Prime Consultants

BBC examined utilization of minority- and women-owned firms as prime consultants to Caltrans and Local Assistance engineering and professional service projects. These analyses are based on reported invoice payments for a sample of Caltrans agreements and on award and payment information for a sample of local agency projects funded with grants from Caltrans.

MBE/WBE and DBE utilization on prime contracts for engineering-related services are higher than the comparable rates of utilization for construction-related prime contracts for Caltrans, Local Assistance and SR 125.

Federally-funded and state-funded prime contracts. The final sample of engineering-related prime contracts included 123 federally-funded contracts from 2002 to April 2006, and 39 state-funded contracts for the entire study period. MBE/WBEs received 10 percent of prime contract dollars for federally-funded contracts and 7 percent of prime contract dollars for state-funded contracts. DBEs received 3 percent and 1 percent of prime contract dollars on these respective prime contract types.

**Figure VIII-1.
MBE/WBE share of prime contract dollars for transportation engineering contracts, federal vs. state funding**

Note:

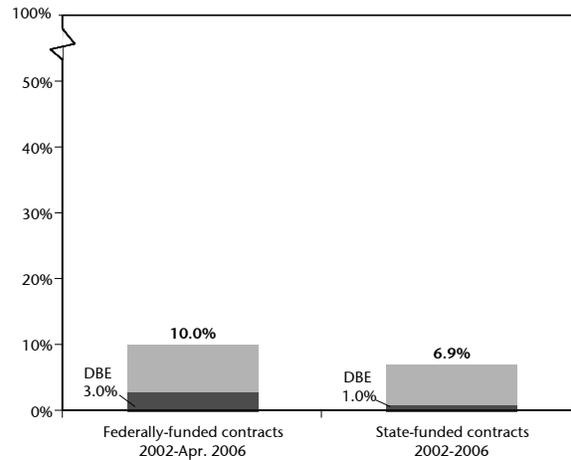
Statistics above each bar is total MBE/WBE utilization. Certified DBE utilization is noted in the bottom portion of each bar. The difference is utilization of MBE/WBEs that were not DBE certified.

For more detail and for results by MBE/WBE group, see Figures E-108 and E-73 in Appendix E.

Number of prime contracts analyzed is 123 for 2002-April 2006 federally-funded contracts and 39 for state-funded contracts.

Source:

BBC Research and Consulting from contract data on Caltrans, Local Assistance and SR 125 contracts.



Utilization of firms by race and gender group. BBC also explored the share of prime contract dollars going to each MBE/WBE group for federally- and state-funded engineering-related contracts. Figure VIII-2 shows that women-owned firms account for nearly all of the dollars going to MBE/WBEs on both contract types. No prime consultant dollars for state-funded engineering services went to minority-owned firms. Only 3 percent of prime contracting dollars for federally-funded engineering services went to minority-owned firms, primarily Subcontinent Asian American- and Hispanic American-owned firms. Among the 39 state-funded prime contracts, only WBEs received prime work.

**Figure VIII-2.
DBE and MBE/WBE
share of federally- and
state-funded prime
contract dollars for
transportation
engineering contracts,
by race/ethnicity/gender**

Note:

Numbers rounded to nearest tenth of 1 percent.

For more detail, see Figures E-108 and E-73 in Appendix E.

Number of prime contracts analyzed is 123 for 2002-April 2006 federally-funded contracts and 39 for state-funded contracts.

Source:

BBC Research and Consulting from contract data on Caltrans, Local Assistance and SR 125 contracts.

		State-funded contracts 2002–2006
MBE/WBEs		
African American-owned	0.0%	0.0%
Asian-Pacific American-owned	0.5	0.0
Subcontinent Asian American-owned	1.4	0.0
Hispanic American-owned	1.2	0.0
Native American-owned	<u>0.0</u>	<u>0.0</u>
Total MBE	3.1%	0.0%
WBE (white women-owned)	<u>6.9</u>	<u>6.9</u>
Total MBE/WBE	10.0%	6.9%
DBEs		
African American-owned	0.0%	0.0%
Asian-Pacific American-owned	0.2	0.0
Subcontinent Asian American-owned	1.4	0.0
Hispanic American-owned	0.7	0.0
Native American-owned	<u>0.0</u>	<u>0.0</u>
Total MBE	2.4%	0.0%
WBE (white women-owned)	0.6	1.0
White male-owned DBE	<u>0.0</u>	<u>0.0</u>
Total DBE	3.0%	1.0%

Disparity Analysis

Although MBE/WBE utilization on engineering prime contracts is larger than the rate at which minority- and women-owned businesses receive construction prime contract dollars, MBE/WBEs received only a portion of the prime contracting dollars expected.

Federally-funded and state-funded prime contracts. Overall, MBE/WBE utilization on prime contracts is lower for state-funded engineering contracts than for federally-funded contracts. MBE/WBEs received 45 cents of every expected dollar of prime contracts funded with federal money. About 27 cents of every dollar expected of state-funded prime contracts went to MBE/WBEs.

The disparities in MBE utilization on engineering prime contracts are clearly most pronounced for state-funded contracts, where minority-owned firms did not receive any of the 39 prime contracts. The disparities are also large when examining MBEs utilization on federally-funded prime contracts.

In contrast, utilization of women-owned prime consultants exceeded availability on federally-funded engineering contracts. WBE utilization on state-funded engineering prime contracts was 82 percent of expected utilization.

Figure VIII-3.
Disparity indices for
MBE/WBE utilization on
federally- and state- funded
transportation engineering
prime contracts, 2002-April
2006 and 2002-2006

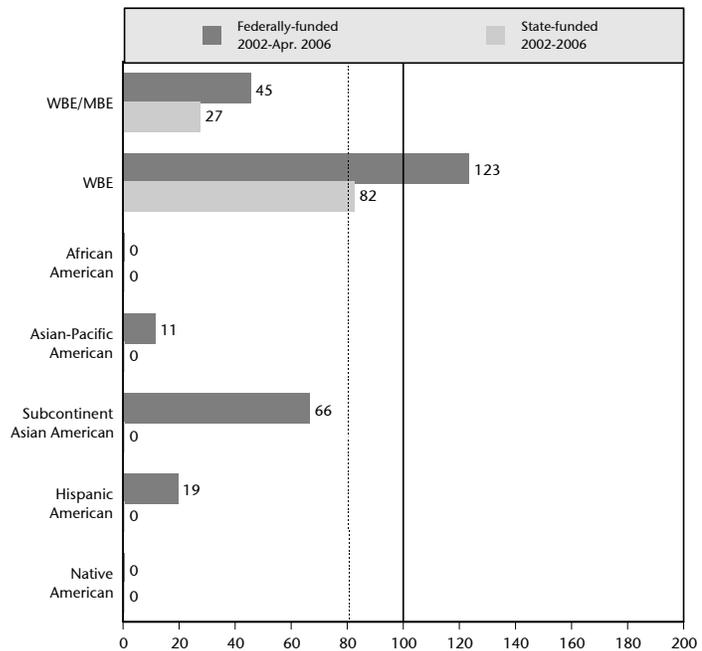
Note:

Includes Caltrans, Local Assistance and SR 125 contracts. For more detailed information, see Figure E-108 and Figure E-73 in Appendix E.

Number of prime contracts analyzed is 123 for 2002-April 2006 federally-funded contracts and 39 for state-funded contracts.

Source:

BBC Research and Consulting.



BBC conducted separate disparity analyses of engineering prime contracts at or below a dollar threshold of \$500,000 to determine if utilization for these contracts might be more comparable to the availability of minority- and women-owned firms for the locations, types and sizes of work comprising these smaller projects. The results reported in Figure VIII-4 indicate even greater disparities between utilization and availability for all MBE/WBE groups on these smaller prime contracts than observed for the full universe of prime contracts discussed in the previous analyses. Relative to their availability, MBE/WBEs fare no better at obtaining work on smaller prime contracts for engineering services than they do at securing their share of prime contract dollars on larger projects.

Figure VIII-4.
Disparity indices for
MBE/WBE utilization on
federally- and state- funded
transportation engineering
prime contracts under \$500K,
2002-April 2006 and
2002-2006

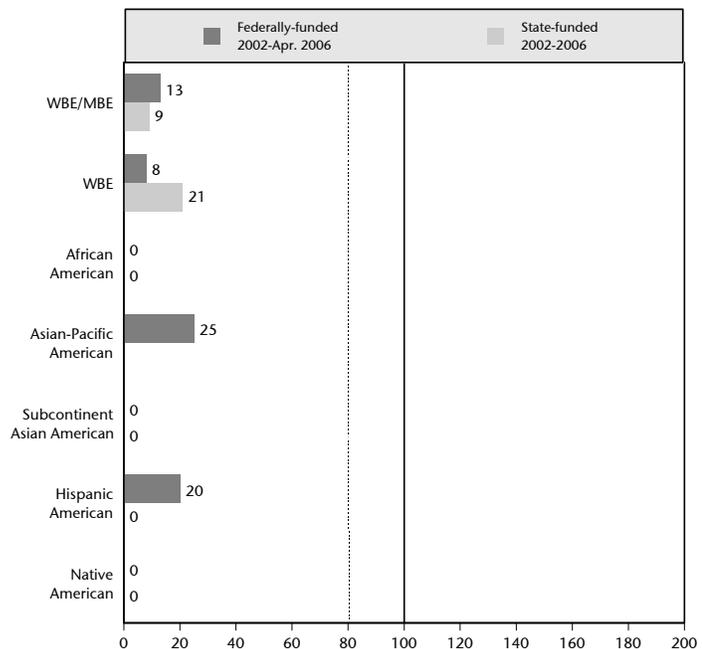
Note:

Includes Caltrans, and Local Assistance contracts. For more detailed information, see Figure E-122 and Figure E-123 in Appendix E.

Number of prime contracts analyzed is 54 for 2002-April 2006 federally-funded contracts and 25 for state-funded contracts.

Source:

BBC Research and Consulting.



Participation of MBE/WBEs in the Private Sector

Many minority- and women-owned engineering firms reported success working as prime consultants in the private sector. These same firms often are limited to subcontracts for public sector work.

However, as discussed in Appendix F, survey data indicate that MBEs and WBEs are less likely to compete for private sector prime contracts when compared with majority-owned firms (with the exception of Native American-owned firms and firms owned by Subcontinent Asian Americans).