

# California State Auditor

BUREAU OF STATE AUDITS

## California Department of Transportation:

**Some Internal Audit Recommendations  
Have Been Implemented, but  
Inconsistencies Exist in Its Contracting  
for Expert Witness Services**



July 1997  
97106

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# CALIFORNIA STATE AUDITOR

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July 15, 1997

97106

The Governor of California  
President pro Tempore of the Senate  
Speaker of the Assembly  
State Capitol  
Sacramento, California 95814

Dear Governor and Legislative Leaders:

## ***Summary***

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Our audit reviewed whether or not the California State Department of Transportation (Caltrans) adopted the three recommendations its Audits and Investigations Division made in a March 10, 1995, interim audit report that studied Caltrans' contracts with Boster, Kobayashi & Associates (Boster), a company that provides expert witness services for accident reconstruction in court cases. We found that for two contracts with Boster written since the report, two of the three recommendations had been adopted, specifically that:

- Boster modified its rate structure to reflect the level of expertise and its underlying costs for individual employees; and
- Caltrans implemented requirements for equipment purchases that were more comprehensive as to dollar amount but less so as to equipment life.

Caltrans did not implement the report's third recommendation, however, which denied compensation for travel time.

In studying 26 out of 514 contracts, Caltrans' Legal Division (legal division) entered into between July 1, 1995, and May 8, 1997, to determine if these recommendations for Boster had been implemented department-wide for expert witness services, we found that:

- The contractor's rate structures were reasonably tied to the level of expertise, the services to be provided, and the underlying costs of their employees;

- All of the contracts entered into after September 1995, contained the clause regarding equipment purchased by contractors, as required by the Service Contracts Manual; and
- Caltrans did not consistently incorporate a clause to address compensation of travel time for its expert witnesses.

We were unable to assess Caltrans' selection process for its expert witness consultants because it has not formally adopted written policies. In addition, for those contracts entered into after the interim audit, Caltrans was unable to provide documentation to support its selection process for determining the best contractor.

The results of our review indicate that although Caltrans has implemented two of the three recommendations for Boster and its other expert witness consultants, it has not incorporated a clause to address compensation of travel time for all its contractors, nor has it formally adopted procedures to assist its staff in selecting these contractors or in negotiating the rates and terms of the contracts.

### **Background**

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In March 1995, the Audits and Investigations Division of Caltrans issued its interim audit report that evaluated standard agreement number 42K364 between Boster and Caltrans. The audit found that, for lower-level associates, Boster's billing rates were excessive because, regardless of the level of expertise, the services to be provided, or the underlying actual costs, Boster employed fixed rates. In addition, the audit found that the contract was not in accordance with the Service Contracts Manual, Chapter 6, Section 6.4, Equipment Purchases (by contractor), which requires an appropriate clause for equipment purchases. Finally, although the contract did not specify terms for travel time compensation, the audit found that compensation for time spent by the consultant traveling to the contractor's office, client offices, or to other locations associated with the contract was excessive.

The Audits and Investigations Division of Caltrans recommended that:

- Future contracts with Boster include rates more reasonably tied to the level of expertise, the services to be provided, and the underlying actual costs;

- The appropriate clause for equipment purchases be included in the contract language per Chapter 6, Section 6.4, Equipment Purchases (by contractor) of the Service Contracts Manual; and
- The clause “The contractor agrees that the State will be billed only for the hours worked by the consultants on this contract and that the time spent by consultants traveling to contractor’s office, client offices, or to other locations associated with this contract shall be at the contractor’s expense” shall be included in future contracts.

According to the deputy director of Caltrans’ Audits and Investigations Division, these recommendations were specific to future contracts with Boster for expert witness services. However, according to the legal division, since August 1995 it has implemented the Boster recommendations, with the exception of the recommendation regarding travel time, for all of its expert witness contracts.

Tort expert witnesses, such as accident reconstructionists and investigators, engineers, and physicians, provide expertise to support Caltrans in litigation. The legal division is responsible for assessing, in response to new tort cases, whether expert witnesses will be required and, if so, whether the experts will be sought from within Caltrans or from the private sector. In addition, the legal division is responsible for all phases of administering and managing tort expert witness contracts.

### ***Scope and Methodology***

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The Joint Legislative Audit Committee requested that the Bureau of State Audits perform an audit of Caltrans’ contracts with Boster. The purpose of our audit was to determine whether Caltrans implemented the recommendations made in the audit conducted by its Audits and Investigations Division. In addition, we were requested to assess Caltrans’ selection process for expert witness contractors to determine whether it complies with state contracting procedures for such services. Finally, although the interim audit addressed only future contracts with Boster, the legal division elected to implement the recommendations, with the exception of the recommendation regarding travel time, for all of its expert witness contracts entered into after July 1995. As a result, we selected a sample of 26 expert witness contracts to determine whether Caltrans had in fact implemented these recommendations in all of its subsequent expert witness contracts.

To understand the findings and recommendations discussed in the internal auditors' report, we interviewed the audit manager and reviewed the audit workpapers and other documentation.

To assess whether Caltrans has implemented the recommendations for subsequent Boster contracts, we reviewed contracts to determine:

- Whether rates were reasonably tied to the level of expertise, the services to be provided, and the underlying actual costs. In addition, we reviewed resumes for Boster employees and compared the experience of each employee to the billing rates charged and the tasks required by the contract. Finally, we compared the wages paid to each employee to the billing rates;
- Whether the appropriate clause was included for equipment purchases; and
- Whether or not the time spent by consultants traveling in connection with the contract was charged to Caltrans, and to note the presence of the recommended clause for travel time compensation. In addition, we obtained information to substantiate the "normal and customary" practices for compensating travel time in the accident reconstruction and investigation industry and compared them to those employed by Boster. We obtained this information from expert witness consultants employed by Caltrans, as well as from private firms that do not contract with Caltrans.

To understand Caltrans' process for selecting expert witness contractors and to determine whether it complies with state contracting procedures for such services, we interviewed the deputy chief counsel of the legal division; we reviewed a narrative of its informal policy prepared for us by the legal division; and we also reviewed the California Public Contract Code, the State Contracting Manual, and the State Administrative Manual and identified relevant statutory provisions and state policies.

To determine if Caltrans implemented the audit recommendations for Boster in its subsequent contracts with other expert witness consultants, we obtained Caltrans' list of legal division contracts for expert witnesses entered into between July 1, 1995, and May 8, 1997. According to its records, the legal division entered into 514 of these contracts during this period. We selected 26 contracts, of which 19 were for expert witness services such as medical evaluation, economic loss evaluation, and rehabilitation.

The remaining 7 contracts were for expert witness services similar to Boster's in the accident reconstruction and investigative industry. We reviewed all 26 of these contracts to see if Caltrans had implemented the Boster contract recommendations. Specifically, we performed the following procedures:

- To determine whether the rates and terms of Caltrans' expert witness contracts are comparable to those of private entities, we surveyed nine private firms providing such services for accident reconstruction and investigation but who have not contracted with Caltrans. The survey established fee ranges for the following types of services: court time, including testimony and deposition; investigative services and other case work; and travel time related to the case. We compared the fees of the private contractors with seven consultants that Caltrans had contracted with.
- To assess the reasonableness of fees billed for expert witness services as compared to the underlying actual cost, we reviewed wage data submitted by Boster and eight additional expert witness contractors and compared the ratios of the fees charged to the wages paid.

***Two of the Three Interim Audit  
Recommendations Were Implemented  
for Subsequent Boster Contracts***

Our review of Caltrans indicated that it implemented two of the three interim audit recommendations. Since March 1995, Caltrans entered into two additional contracts with Boster. We were able to confirm that Boster modified its rate structure in the new contracts to include rates more reasonably tied to the level of expertise, the services to be provided, and the underlying costs for its employees.

In the interim audit, the internal auditors found that Boster used a billing rate of \$150 to \$175 per hour for junior associates while paying them \$10 per hour, resulting in an average ratio of billing rates to cost of approximately 16 to 1. For the 1996 and 1997 contracts between Caltrans and Boster, Boster did not employ junior associates. According to Boster's business manager, the junior associates identified in the interim audit had received their certification to become professional engineers and were promoted to the associate level. Our review of the contracts indicated that billing rates for associates continued to range from \$150 to \$175 per hour. In addition, we found that Boster paid wages to associates ranging

from \$17.50 per hour to \$80 per hour, resulting in a ratio of billing rates to cost range of 1.9 to 1 and 10 to 1. However, for all services provided by Boster, the ratio of billing rates to costs averaged 3.2 to 1. In reviewing the wage and billing rate data submitted by Boster and eight additional expert witness contractors, we noted that the average ratio of billing rates to cost was 3.3 to 1. Therefore, Boster's ratio of billing rates to the underlying cost appears reasonable.

For the two contracts discussed above, we noted that the appropriate clause for equipment purchases per Chapter 6, Section 6.4, Equipment Purchases (by contractor) of the Service Contracts Manual, as recommended by the interim audit, was included in the contract language. However, the contracts do not reflect the clause for equipment purchases by contractors required by the 1996 revision of the State Contracting Manual. Specifically, Section 7.29(c) of the State Contracting Manual requires the contractor to maintain an inventory of all equipment with an approximate cost of \$5,000 or more and a normal life expectancy of one year or more. While the current language in Caltrans' contracts includes a more comprehensive requirement than the State Contracting Manual by including purchases of equipment over \$500 as opposed to \$5,000, it requires that the equipment must also have a useful life of at least two years as opposed to one year. This policy would exclude a piece of equipment that cost \$5,000, for example, with a life expectancy of less than two years. In our opinion, to ensure proper accountability for equipment purchased by contractors, Caltrans should modify its existing clause to comply with the State Contracting Manual, Section 7.29(c).

Though it did implement two audit recommendations, Caltrans did not implement the recommendation that future contracts with Boster contain a clause restricting compensation for travel time. According to the deputy chief counsel, the recommendation was not implemented because it is both "normal and customary" for contractors who provide accident reconstruction and investigative expert witness services to bill for travel time from door to door.

To substantiate the "normal and customary" industry practices for billing travel time, we surveyed 16 contractors, comprised of 7 that currently contract with Caltrans and 9 private firms that do not contract with Caltrans. We found that 13 of 16 (81 percent) bill their clients for travel time. In addition, of these 13, 8 (62 percent) bill them at their standard rates and 5 (38 percent) bill them at partial rates. Although the results of our survey indicate that it is "normal and customary" for contractors who provide accident reconstruction and investigative expert witness services to bill for travel time, there

are inconsistencies in this practice. Therefore, in our opinion, Caltrans should incorporate a clause for all of its contracts with expert witness consultants that addresses compensation for travel time. Caltrans should negotiate whether it will compensate travel time from door to door or one way, for example, and specify the billing rate.

***Caltrans Lacks Formal Contractor Selection Policies for Expert Witness Services***

The legal division oversees the contracting practices for the tort expert witness services of its four regional offices. As part of its oversight authority, the legal division is responsible for reviewing and approving all contracts for such services submitted by its regional offices. Specifically, the legal division is to ensure that the regional offices comply with state laws, rules and regulations and that they use funds wisely and economically. However, since the legal division does not have formal written procedures for selecting expert witness contractors or negotiating the rates and terms of the contracts, it has not provided its regional offices with sufficient guidance in this area.

Upon our request, the legal division provided us with a narrative summarizing its informal policy for selecting these contractors. According to the narrative, in determining whether a tort case may be handled by Caltrans' staff or outside expert witnesses, the Caltrans case attorney reviews the case file and assesses the legal and factual issues of the case, the likelihood of a finding of liability, and the amount of potential exposure. After making an assessment, the attorney decides whether the case may be handled by Caltrans' staff or by consultants.

The decision to use either an employee or an outside expert depends on the following:

- The expert's education, knowledge, and forensic experience in the subject matter compared to that of the plaintiff's expert;
- The amount of testifying experience the expert has and how credible and effective he or she is as a witness in a deposition and at trial;

- The department's success rate using a particular expert;
- The composition of the expected jury pool;
- The additional services an expert can provide with his or her use of computer analysis, animation, and court exhibits; and
- The cost of a particular expert over other possible experts.

If the case attorney decides to use outside experts, the experts are generally those known by the individual attorneys or referred to them by other attorneys. For example, we found that the attorneys frequently use Boster, located in Livermore, for each of its four regional offices in Sacramento, San Francisco, Los Angeles, and San Diego, as their primary contractor because Boster provides service in all areas of accident reconstruction and investigation and it has a history of being instrumental in Caltrans' successful case defense. However, as shown in the table below, for many types of expert witness services used by Caltrans, there are multiple providers in each of its four regions. Although the informal policy appeared reasonable, we believe that Caltrans should require its attorneys to consider using local consultants to minimize travel costs.

**Table**

Expert Witness Service Provided	Number of Providers in Close Proximity to:				Total
	Sacramento	San Francisco	Los Angeles	San Diego	
Accident reconstruction*	5	8	13	7	33
Traffic engineers	5	1	8	0	14
Economist loss evaluation	3	5	6	3	17
Forensic-toxicology medicine	2	2	2	0	6
Medical evaluation	6	13	8	6	33
Professional engineer	0	4	2	2	8
Rehabilitation	2	4	1	2	9

Source: Caltrans' List of Expert Witness Consultants

\*Includes those consultants specializing in more than one area of expertise.

Furthermore, the legal division was unable to provide evidence of the process it used to determine which contractor would provide the most effective services at the best terms and rates for the two

additional Boster contracts and the 26 contracts for other consultants. As a result, we were unable to assess the adequacy of Caltrans' process for selecting these contractors and negotiating the rates and terms of their contracts.

***Inconsistencies Exist in Applying Interim Audit Report Recommendations to Caltrans' Other Expert Witness Contractors***

According to the deputy director of the Audits and Investigations Division of Caltrans, the recommendations included in its interim audit were specific to future contracts with Boster. However, according to the legal division, since August 1995 it has implemented the Boster recommendations, with the exception of the recommendation regarding travel time, for all of its expert witness contracts. Based upon this assertion, we reviewed 26 of the 514 contracts for expert witness services that the legal division entered into between July 1, 1995, and May 8, 1997. Nineteen of the 26 contracts were for expert witness services such as medical evaluation, economic loss evaluation, and rehabilitation, and 7 contracts were for expert witness services similar to Boster's in the traffic accident reconstruction and investigative industry. Of the 26 contracts, 9 of the contractors were sole proprietors and did not employ associates. For the remaining 17, the contractors employed more than one level of associate, and for 16 of the 17 contracts, the contractors billed Caltrans using a billing scale based upon an individual's experience and qualifications. For the one contract that did not use this scale, the contractor billed all associates at the same rate without regard for the level of service or underlying cost. As a result, Caltrans may have paid excessive amounts for these services.

In addition, we found that although for 2 of the 17 contracts, the contractors did not disclose their associates or the level of their associates' expertise in the contract as required by Public Contracting Code, Section 10371(e)(2), Caltrans approved and paid invoices for these services. Consequently, since Caltrans did not require the contractors to identify all associates and their level of expertise used for these contracts, it cannot ensure that these contractors billed for the correct employees at the appropriate rates for their level of expertise.

For these 26 contracts, the rates for deposition and trial testimony, excluding the services for medical evaluations, ranged from \$50 to \$350 per hour. We surveyed 9 private sector firms providing accident reconstruction and investigative services who have not contracted with Caltrans and found that their rates for deposition and

trial testimony ranged from \$150 to \$300 per hour. In our opinion, the rates charged to Caltrans on its contracts appear reasonable in comparison to those charged in the private sector. Additionally, based upon our review of the wage data submitted by Boster and eight additional contractors, we found that the fees charged by these contractors are relative to the underlying costs. Specifically, we found that the average fees to salaries for all types of employees was approximately 3.3 to 1. Further, we found for the 26 contracts we reviewed, all of those entered into after September 1995 included a provision for equipment purchases as was recommended. However, as we previously described in the section on Boster, the contracts do not reflect the clause for equipment purchases by contractors required by the 1996 revision of the State Contracting Manual.

Finally, we found that Caltrans did not demonstrate a consistent policy for compensating travel time for these expert witness contractors. Specifically, for 19 of 26 contracts we reviewed, Caltrans did not incorporate a clause to address travel time as recommended by its internal auditors' report for Boster. Further, for 2 of these 19 contracts, we found that the contractors received compensation for travel time even though the contracts were silent on the matter. However, according to the deputy chief counsel, one contract was let prior to Caltrans' implementation of the interim audit recommendations for the Boster contract. In addition, we noted that the other contractor was an accident reconstruction and investigation consultant, for which, as discussed on page 6, it is "normal and customary" in this industry to bill for travel time. For the remaining 7 of the 26 contracts we reviewed, Caltrans incorporated terms to address travel time compensation. Specifically, we noted that Caltrans compensated travel time for five contractors under the specific provisions of the contract. Further, we found that one contract stated that the contractor would not be reimbursed for travel unless approved by the contract manager. Lastly, we noted that one contract contained the clause excluding the compensation for travel time recommended by the interim audit report for Boster.

### ***Conclusion***

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Caltrans has implemented two and not implemented one of the interim audit recommendations for its subsequent contracts with Boster. Specifically, for the two recommendations that have been implemented we found that Boster has modified its rate structure to include rates more reasonably tied to the level of expertise, the services to be provided, and the underlying costs and that the contracts contained a clause regarding equipment purchased by

contractors as required by the Service Contracts Manual. However, Caltrans chose not to implement the recommendation requiring a clause to restrict compensation for travel time. According to Caltrans, for contractors who provide accident reconstruction and investigative expert witness services, it is both “normal and customary” in their industry to bill for travel time from door to door.

Furthermore, Caltrans has not formally adopted procedures to assist its staff in selecting expert witness contractors and was unable to provide evidence of the process it uses to choose an effective contractor at the best terms and rates. As a result, we were unable to assess the adequacy of Caltrans’ process for selecting these contractors and negotiating their contracts.

For the contracts we reviewed, we found that the rates charged to Caltrans on its contracts appear reasonable in comparison to those charged in the private sector, and that all of those contracts entered into after September 1995 contained the clause regarding equipment purchased by contractors as recommended by its internal auditors’ report for Boster. However, the contracts did not comply with the 1996 revision of the State Contracting Manual.

Finally, we found that Caltrans did not demonstrate a consistent policy for compensating travel time for expert witness contractors providing accident reconstruction and investigation services similar to Boster’s as well as for other services. Specifically, for 19 of the 26 contracts we reviewed, Caltrans did not incorporate a clause to address travel time as recommended by its internal auditors’ report for Boster.

## ***Recommendations***

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To ensure that Caltrans employs consistent policies in selecting contractors for expert witness services and negotiating the rates and terms of their contracts, it should formalize its selection criteria and provide guidelines to its regional offices. In addition, the regions should document the factors they evaluate when selecting a specific contractor. Finally, in addition to selecting contractors based on expertise and rate structure, Caltrans should employ a database of these contractors based on their location. By using contractors local to the job site, Caltrans may eliminate or reduce some costs associated with the projects.

To ensure that there is proper accountability for equipment purchased by contractors, Caltrans should modify its existing clause to comply with the provisions of State Contracting Manual, Section 7.29(c).

To protect the State's interests, Caltrans should incorporate a clause addressing compensation for travel time in all its expert witness contracts. In addition, the clause should address the "normal and customary" practice for accident reconstruction and investigative expert witness contractors. Specifically, Caltrans should negotiate whether it will compensate travel time from door to door or one way, for example, and specify the billing rate.

We conducted this review under the authority vested in the California State Auditor by Section 8543 et seq. of the California Government Code and according to generally accepted governmental auditing standards. We limited our review to those areas specified in this report. The information in this report was shared with the department, and we considered its comments.

Respectfully submitted,



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June 30, 1997

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Dear Mr. Sjoberg:

In reference to your draft report on the Caltrans' Expert Witness contracts, I am in concurrence with your findings and recommendations. The department has implemented the recommendations detailed.

I appreciate the opportunity to respond to your report.

Sincerely,

DEAN DUNPHY  
Secretary

cc: Members of the Legislature  
Office of the Lieutenant Governor  
Attorney General  
State Controller  
Legislative Analyst  
Assembly Office of Research  
Assembly Majority/Minority Consultants  
Senate Majority/Minority Consultants  
Capitol Press Corps