

California State Auditor

B U R E A U O F S T A T E A U D I T S

California's Department of Transportation:

*Has Improved Its Process for Issuing
Permits for Oversize Trucks, but More
Can Be Done*



May 2000
99141

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CALIFORNIA STATE AUDITOR

MARY P. NOBLE
ACTING STATE AUDITOR

STEVEN M. HENDRICKSON
CHIEF DEPUTY STATE AUDITOR

May 31, 2000

99141

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

Dear Governor and Legislative Leaders:

As requested by the Joint Legislative Audit Committee, the Bureau of State Audits presents its audit report concerning the effectiveness of the procedures that the California Department of Transportation (Caltrans) permitting unit uses to approve travel routes for oversize vehicles and loads.

This report concludes that Caltrans has identified the major problems with its permitting process: poor communication of roadway information and an inefficient manual system for writing permits. Moreover, the corrective actions Caltrans is pursuing, such as drafting new policies, hiring additional staff, and developing a proposal and seeking approval for an automated routing system, are generally appropriate. However, we suggest that further improvements are needed, such as designating district staff to coordinate communication between the permits branch and field personnel and ensuring that its policies are clearly communicated to those who have responsibility for implementing them.

Respectfully submitted,

MARY P. NOBLE
Acting State Auditor

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SUMMARY

Audit Highlights . . .

Our review of California's Department of Transportation's (Caltrans) process for issuing permits disclosed:

- Roadway changes are not always promptly communicated to the permits branch.*
 - Hundreds of field personnel report roadway changes to only two regional liaisons.*
 - Policies and procedures for reporting roadway changes differ among reporting units.*
 - Caltrans is taking steps to improve communication of roadway information.*
 - The process for writing permits is inefficient, labor intensive, and susceptible to human error.*
-

RESULTS IN BRIEF

Oversize vehicles—vehicles that exceed certain height, weight, length, and width dimensions specified in the California Vehicle Code—require special permits and routing to travel on California's highways. California's Department of Transportation (Caltrans), through its Transportation Permits Branch (permits branch), is responsible for issuing permits and identifying safe routes for these vehicles. Problems with erroneous permits, or permits with routing errors, have contributed to incidents ranging from traffic delays to accidents, including one in which a motorist was killed. Our review of the process of issuing these permits found that Caltrans has identified the major problems with the permitting process: poor communication of roadway information and an inefficient manual system for writing permits. Moreover, the corrective actions it is pursuing are generally appropriate, although we suggest further improvements.

In fiscal year 1998-99, the permits branch issued approximately 186,000 permits for oversize vehicles that hauled loads such as manufactured housing units, storage tanks, large boats, and construction equipment to destinations throughout the State. According to Caltrans, during the period January 1996 through April 2000, 31 accidents involving oversize vehicles that struck bridges may have resulted from erroneous permits. One of these accidents, in July 1999, resulted in a fatality, raising public concerns about the effectiveness of the permits program. In response to these concerns, Caltrans has devoted significant resources to identifying problems with its permits program and proposing solutions, and it has started corrective action on most of the problems it has found.

A major problem Caltrans identified is poor communication of roadway information from its districts to the permits branch. In working to route oversize trucks safely on the state highway system, permit writers rely heavily on roadway information that is constantly changing. However, these changes are not always promptly communicated to the permits branch. As a result, Caltrans cannot reasonably ensure that oversize vehicles can safely travel approved routes and that California's highway

infrastructure is protected from damage by these vehicles. Although this lack of timely information poses a potentially significant risk to public safety, the extent of the problem is unclear because Caltrans has incomplete data on the number of erroneous permits that have led to incidents other than accidents, such as traffic delays and unexpected route changes.

One reason for Caltrans' unsatisfactory communication of roadway information is its reporting structure. Caltrans' policies require hundreds of its personnel to report roadway changes to only two regional liaisons, who must analyze this information to determine whether to update the routing database with the new information. A second factor contributing to Caltrans' poor communication is the differences in the policies and procedures under which the permits branch and other Caltrans units operate. The personnel reporting roadway changes are from Construction, Maintenance, Traffic Operations, and the Office of Structures Maintenance and Investigations, four functionally separate units within Caltrans. Each unit has its own policies and procedures, which may differ from those of the permits branch in terms of what changes to report, when to report them, and who is responsible for reporting.

Caltrans is taking steps to improve its communication of roadway information. In February 2000, it submitted a request for funding to the Department of Finance asking for additional staff to reduce the workload of the two regional liaisons, but the Department of Finance denied this request because Caltrans did not adequately justify its need. Caltrans has also drafted new communication policies and procedures for the Maintenance and Traffic Operations programs and has approved a new communication policy for the Construction program. The Office of Structures Maintenance and Investigations is in the process of developing a draft communication policy. These new and draft policies are intended to be consistent with the information needs of the permits branch. However, it is not clear that the expectations for these new policies have been clearly communicated to the managers of all of these units. Our discussions with representatives of the permits branch and one of the units that is responsible for reporting roadway changes revealed that some disagreement still exists as to what the new policies cover.

Another major problem Caltrans has identified is its inefficient, labor-intensive process for writing permits. This process requires permit writers to review permit applications manually, sort through information from a variety of sources to identify a safe

route, and then handwrite the approved route on the permit application. Also, because Caltrans' current system does not have adequate electronic controls to prevent the issuance of erroneous permits, it uses a second permit writer to manually double-check all overheight permits. Not only is this heavy reliance on manual processes an inefficient use of resources, it is also susceptible to human error. Finally, Caltrans does not enforce its policy requiring permit applicants to use its standard permit application forms; consequently, permit writers must work with different and sometimes confusing permit application forms.

In February of this year, Caltrans requested, but has not yet received, funding to develop an automated permit-routing system that will address many of these problems. If the funding is approved and the system is built as proposed, it should improve public safety by reducing the risk of issuing erroneous permits. It will also automate many phases of the permit-writing process that are now performed manually, making the process more efficient. Even if the funding is approved, however, Caltrans' time line for implementing the new system may be overly optimistic. Moreover, the new system will not solve certain problems. For example, some Caltrans employees we interviewed raised concerns that Caltrans has not developed standard procedures for writing permits, that its training for new and experienced permit writers is insufficient, and that turnover in the permits branch is high. Our work confirms that these concerns are legitimate.

RECOMMENDATIONS

To reduce the number of staff reporting roadway changes to the two regional liaisons, Caltrans should designate district staff to coordinate communication between the permits branch and personnel working in the field. It should also establish a process that holds accountable staff who do not comply with reporting policies.

To ensure that the database of roadway information is consistently updated with timely and accurate information, Caltrans should clearly communicate to all responsible parties its policies and procedures regarding the types of roadway information that must be reported.

To improve its process for writing permits for oversize vehicles, Caltrans should develop an automated routing system. If its current request for an automated routing system is not approved, Caltrans should seek approval again in the next budget cycle. In its new request, it should include an analysis of its staffing requirements and should also identify what the funding source would be.

To ensure that permit writers are properly qualified and trained, Caltrans should expand training for new permit writers, develop an ongoing formal training program for experienced permit writers, and consider using a different classification for permit writers that better reflects the skills and qualities required in the permit-writer job.

AGENCY COMMENTS

Caltrans generally agrees with our findings and recommendations. In addition, it suggested several wording changes to the draft report, some of which we have accepted and incorporated in the final report. ■

INTRODUCTION

BACKGROUND

California's Department of Transportation (Caltrans) is responsible for planning, designing, building, operating, and maintaining California's state highway system. As part of this responsibility, Caltrans manages approximately 15,000 miles of highway, over 12,000 bridges, and more than 230,000 acres of right-of-way. To ensure the safety of the motoring public and the integrity of this infrastructure, the California Vehicle Code (code) establishes height, weight, length, and width restrictions for vehicles and their loads. Vehicles or loads that exceed these limitations are considered oversize and require a special permit to operate on the state highway system. The code authorizes Caltrans to issue special permits for the movement of these oversize vehicles along specified routes on the state highway system. This helps ensure that oversize vehicles can pass under bridges without hitting them and travel roads without damaging the roadbed. Similarly, the code authorizes county and city governments to issue special permits for the movement of oversize vehicles through their jurisdictions.

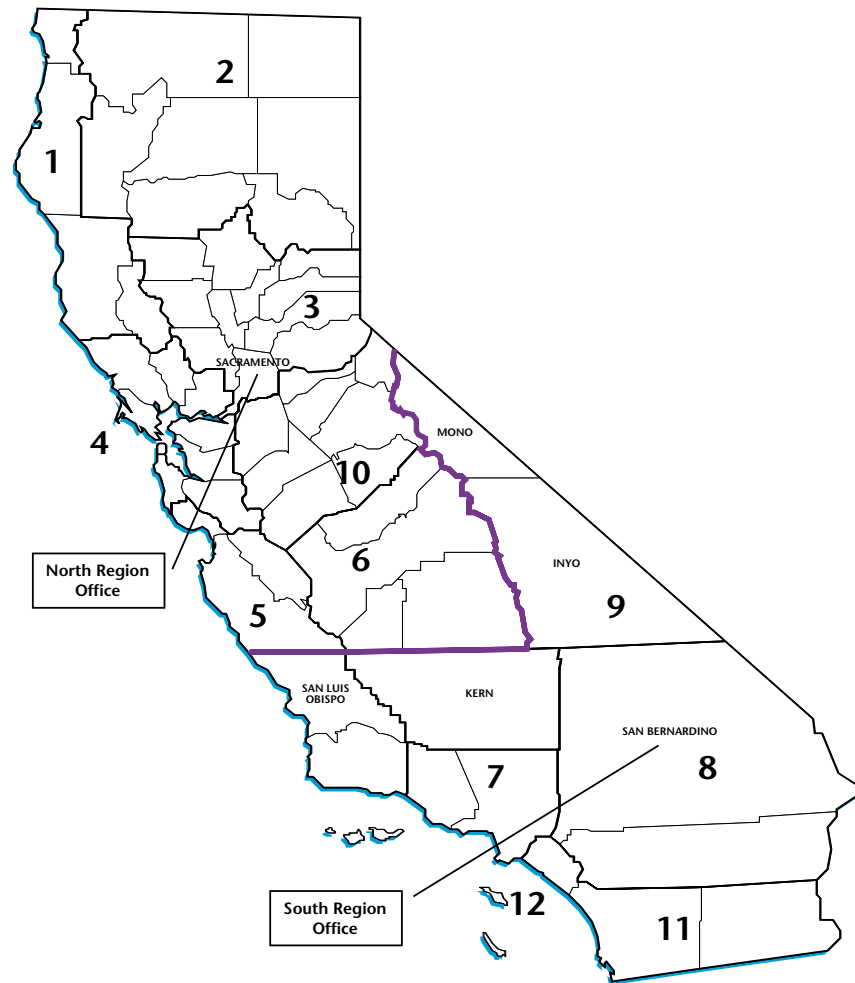
As the agency responsible for approving oversize permits, Caltrans faces the challenge of balancing the expectation of the commercial trucking industry for the timely issuance of permits with the need to ensure the safety of the motoring public and to protect the State's transportation infrastructure. Balancing these demands has become increasingly difficult as the State faces increased traffic congestion from population growth, the need to maintain and reconstruct an aging highway system, construction of additional highways and bridges to keep up with population growth and commuter trends, an increase in the size and complexity of commercial trucks and their loads, and an increase in the volume of requests for permits. In addition, some truckers do not comply with the requirements to have valid permits or to follow approved routes, thereby risking their own safety as well as the safety of other drivers.

The Transportation Permits Branch (permits branch), a unit within the Office of Truck Services, administers the oversize permits program. Two regional offices, located in Sacramento (North Region) and San Bernardino (South Region), issue the

permits. The region where the load originates is responsible for processing the permit. For example, a trucking company whose load originates in Redding will apply for a permit in the North Region Office. Figure 1 illustrates the counties served by each regional office.

FIGURE 1

Twelve Districts Served by the Two Regional Offices of the Permits Branch



The permits branch primarily issues four types of permits for oversize vehicles: single-trip, annual, repetitive, and variance. A single-trip permit authorizes travel from a single point of origin to a single destination in one direction. An annual permit authorizes certain standard loads or vehicles to travel within a specific geographical area. A repetitive, or multitrip, permit

allows the delivery of the same load over the same route on a regular basis for up to one year. Finally, a variance permit authorizes travel for very large or extremely heavy loads, such as those in the photographs in Figure 2. Single-trip permits represent approximately 90 percent of all permit activity. In fiscal year 1998-99, the permits branch issued approximately 186,000 oversized permits, of which 169,000 were single-trip permits. These permits are normally good for five days, with travel restricted to times and days of the week specified on the permits.

FIGURE 2

Two Examples of Oversize Vehicles That Require a Variance Permit



Source: Caltrans permits branch.

The permits branch issues permits for oversized vehicles after reviewing proposed routes for adequate clearances and special conditions that can restrict a route. Although certain changes in roadway conditions cannot be anticipated, such as vehicular accidents, natural disasters, or severe weather, other changes are due to planned activities such as construction projects,

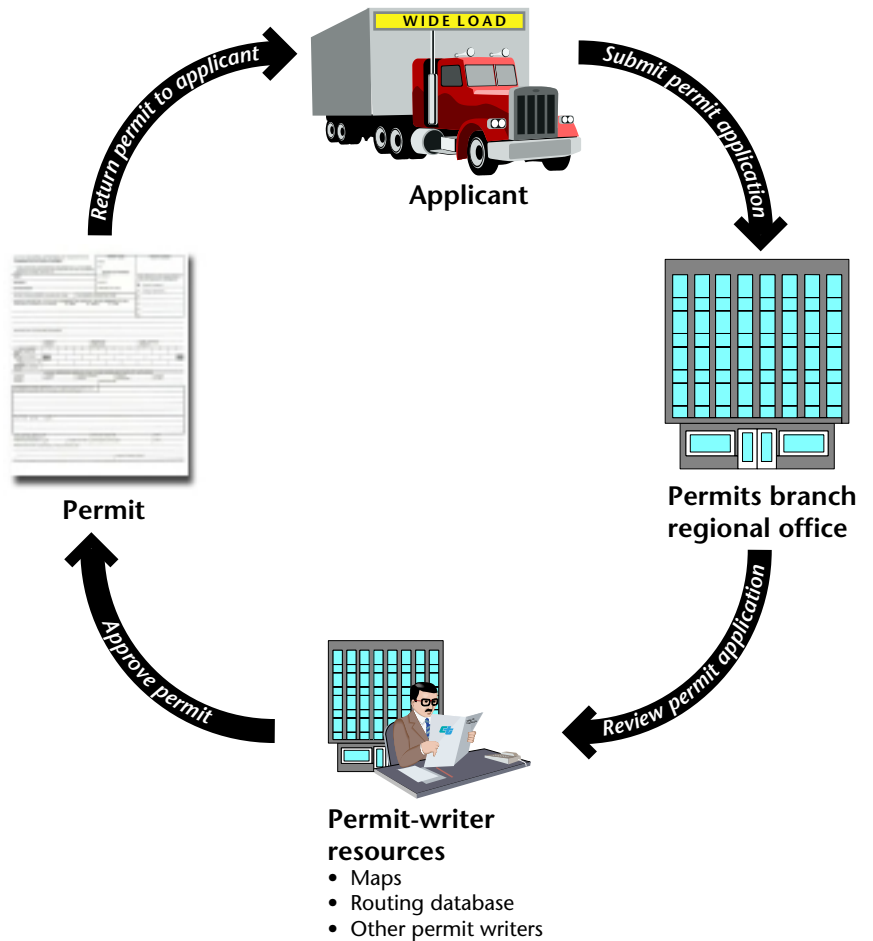
maintenance, and special uses of the highway. The permits branch relies on other Caltrans units to keep it informed of these planned activities so that it can safely route oversized loads on the state highway system.

For example, it relies on the Construction program for information about new and ongoing construction projects; the Maintenance program for information about planned and ongoing maintenance projects; the Office of Structures Maintenance and Investigations for information about bridge load capacity ratings; and the Traffic Operations program, which issues encroachment permits, for information about special uses of the highway, such as local construction of highway improvements, utility work, commercial filming, and special events. It also relies on district traffic management centers and public affairs offices for information about lane and ramp closures and other conditions affecting the roadway. Two regional liaisons gather this information and use it to place restrictions on travel routes in the routing database, the primary tool permit writers use to develop and check requested routes. To request routes, customers submit permit applications to a regional office of the permits branch for approval. Figure 3 provides an overview of the permitting process.

After an accident involving an oversized load resulted in the death of a motorist, concerns were raised about the effectiveness of Caltrans' permit-writing process. On July 16, 1999, a motorist was killed in Orange County when an oversized vehicle struck a bridge as it attempted to pass under the structure, pulling its load off the truck onto the top of a passenger vehicle. Caltrans contributed to the cause of this accident because it incorrectly approved a permit authorizing the vehicle to travel along a route that included a 14-foot-10-inch overcrossing when the truck driver reported his truck's loaded height at 15 feet. However, according to the accident report, the collision was a direct result of the truck driver's error because he was traveling at an unsafe speed. Although the driver observed a sign on the overcrossing indicating the vertical clearance to be 14 feet 10 inches, he was unable to stop the vehicle before hitting the bridge. The report also stated that the truck driver had not appropriately secured the load and had not accurately measured the loaded height of his vehicle, which actually exceeded 15 feet. As a result of this accident, Caltrans is examining its permit-writing process to ensure that it is as safe as possible.

FIGURE 3

Typical Permitting Process



SCOPE AND METHODOLOGY

The Joint Legislative Audit Committee (committee) asked the Bureau of State Audits to perform an audit of the procedures that the Caltrans permits branch uses to approve travel routes for oversize vehicles and loads. Specifically, the committee was concerned that mistakes in routing oversize vehicles and loads could lead to even more accidents if not corrected.

To understand the permitting process, we reviewed documentation of the existing permitting process, including the computerized tools—such as the routing database—that staff use to approve proposed travel routes. This review, combined with interviews of

Caltrans staff and representatives of the trucking industry and the California Highway Patrol, allowed us to assess the methodology Caltrans has used to develop corrective action.

We reviewed Caltrans' policies and procedures for communicating information about roadway changes that can affect the travel of oversize vehicles. We also assessed the experience and educational requirements for the permit-writer position and reviewed Caltrans' training program for new and experienced permit writers, to determine whether permit writers are adequately qualified and trained.

Finally, we reviewed Caltrans' efforts to improve its permitting process to determine whether additional steps are needed. As part of this work, we reviewed Caltrans' documentation for a proposed new automated permit-writing system to determine whether the proposed system will address the deficiencies that Caltrans has identified in the existing permitting process. ■

AUDIT RESULTS

CRUCIAL INFORMATION THAT PERMIT WRITERS USE TO ROUTE OVERSIZE VEHICLES ON THE STATE'S HIGHWAYS IS NOT CONSISTENTLY UPDATED

The Transportation Permits Branch (permits branch) of California's Department of Transportation (Caltrans) relies on timely and accurate information about state highways and bridges, but it does not consistently and promptly receive the information it needs to update its database of roadway information. There are two main causes for this inadequate communication of roadway information: a reporting structure in which too many individuals report roadway changes to only two liaisons and inconsistent policies in the units that report and receive roadway information. Caltrans is taking steps to address each of these issues, but its past efforts to correct these problems have fallen short.

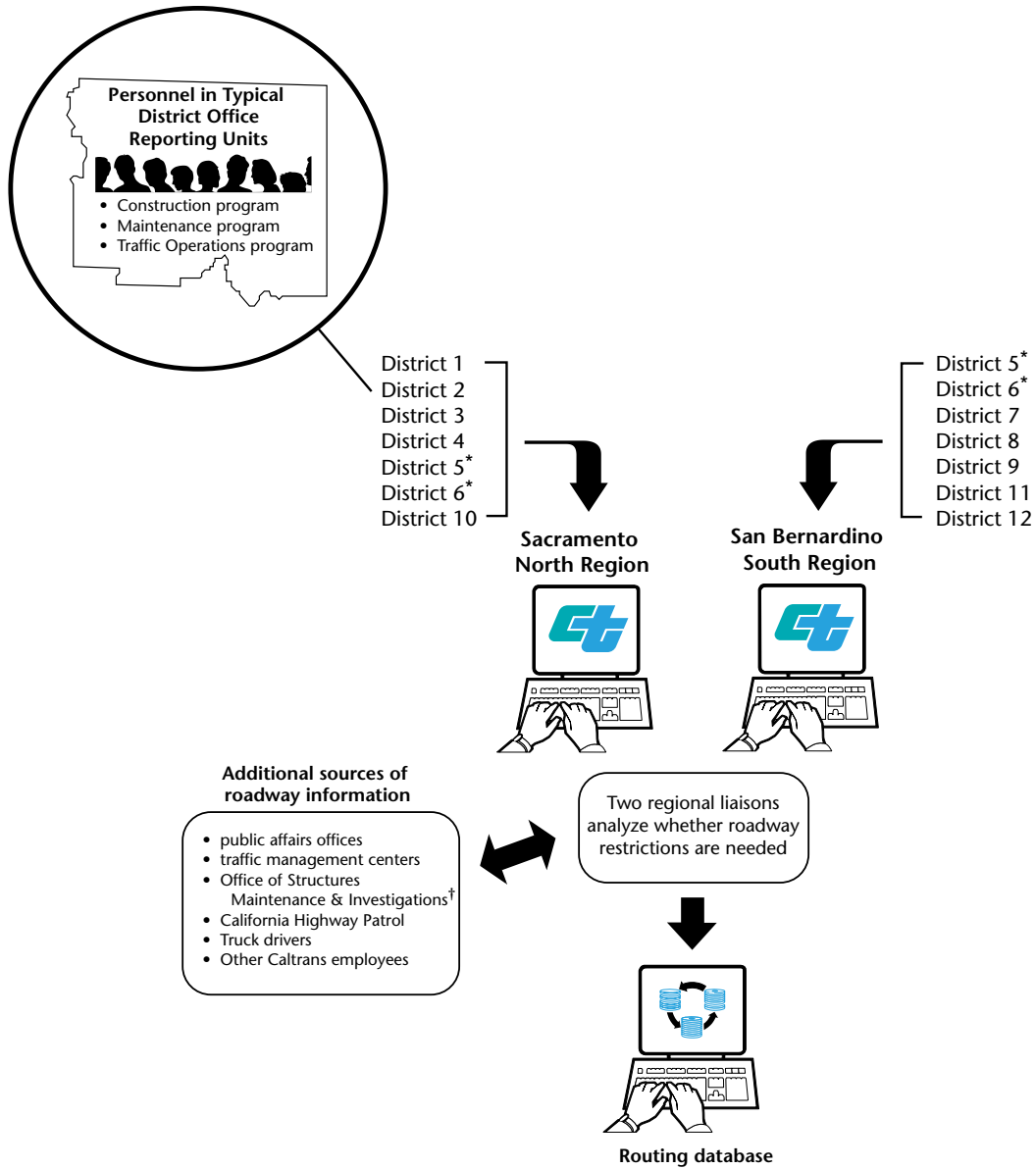
Caltrans' Reporting Structure Has Too Many Individuals Reporting to Too Few

Caltrans currently has too many personnel reporting changes in road conditions via e-mail, fax, and phone to only two individuals working as regional liaisons. Further, these liaisons have no authority to enforce reporting requirements. As Figure 4 indicates, the permits branch relies on other Caltrans units—primarily the Construction, Maintenance, and Traffic Operations programs and the Office of Structures Maintenance and Investigations—to provide the required data and information for the routing database. The Office of Structures Maintenance and Investigation operates at Caltrans headquarters and at 2 of Caltrans' 12 district offices; the other three units operate at all 12 district offices throughout the State, where hundreds of resident engineers, maintenance supervisors, and other Caltrans personnel oversee construction and maintenance projects in various stages of completion. Caltrans' Construction and Maintenance programs have approximately 1,000 resident engineers and maintenance supervisors, many of whom are responsible for reporting roadway changes. Certain projects, such as landscape planting and irrigation projects, do not affect the roadway. However, at any given time hundreds of individuals

can be involved in projects that require them to report changes to only two regional liaisons, who have to evaluate all of the changes and update the database promptly so that permit writers have the most current information.

FIGURE 4

Twelve Districts Provide Two Regional Liaisons With Roadway Information



* Districts 5 and 6 are split between the North and South Regions.

† The Office of Structures Maintenance and Investigations operates in two district offices.

Each of the two regional liaisons—one of whom collects and analyzes information from the northern and central part of the State and one of whom does the same for the southern part of the State—uses the information provided by other Caltrans personnel to update the database of roadway information that permit writers use to develop and check requested routes. This reporting process is complicated by the fact that the personnel who are responsible for reporting roadway changes and the permit writers work for different units within Caltrans. Nevertheless, even if all of those involved in reporting and updating roadway information worked in the same unit, a system that relies on numerous individuals to report crucial, timely information to only two liaisons is inefficient and difficult to manage effectively.

Caltrans Lacks Uniform Policies and Procedures for Reporting Roadway Changes

The problem of poor communication of roadway changes is exacerbated by the fact that each of the reporting units—Construction, Maintenance, Traffic Operations, and Structures Maintenance and Investigations—has its own policies and procedures governing the reporting of roadway change information to the permits branch. These policies are not uniform and do not always specify who is responsible for reporting roadway changes.

Reporting units do not follow the same policies and procedures for reporting roadway changes.

To gain reporting consistency among the four reporting units, the Traffic Operations program, of which the permits branch is a part, created a policy in November 1997 (1997 policy) for reporting roadway changes. The 1997 policy emphasized the importance of providing timely information about both temporary and permanent changes in roadway clearances to the regional liaisons in the permits branch. In addition, the 1997 policy defined the criteria for timely reporting as at least 15 days prior to a change. In other words, a designated reporting employee is responsible for informing the regional liaison of a planned roadway change 15 days before the change is to take effect. Although most permits are valid for 5 days, the permits branch requires 15 days' advance notice for roadway changes because some permits are valid for more than 5 days and others are approved several days in advance of the travel.

The 1997 policy applies only to the Traffic Operations, Construction, and Maintenance programs. According to the chief of Caltrans' Office of Truck Services, the Office of Structures

Maintenance and Investigations was not a signatory to the policy because it does not make changes to the roadway, and the policy dealt only with reporting planned changes to the roadway. The Office of Structures Maintenance and Investigations is responsible for inspecting bridges and verifying their load capacities. Nevertheless, it is also responsible for letting the permits branch know of any changes to load-capacity ratings as soon as it discovers the changes so that the permits branch can reflect this information in its routing database.

To implement its 1997 policy, the Traffic Operations program needed the cooperation of the Construction and Maintenance programs. However, even though the top managers of all three programs signed the policy and distributed copies to program managers at the district level, the Construction and Maintenance programs did not incorporate the specific requirements of the 1997 policy into their own policies until recently, when they drafted new policies. Instead, these two programs continued to use their previous reporting requirements.

Even though the top managers of the Construction and Maintenance programs signed the 1997 reporting policy, they had not incorporated it into their own program policies until recently.

For example, until March 2000, the policy for the Construction program specified that the liaison should be notified one to two weeks in advance of a clearance change, rather than 15 days in advance, as specified in the 1997 policy. Most permits are valid for at least 5 days, and some permits are written in advance. If there is a change in the roadway, the one-week's notice permitted by this policy does not give the regional liaisons sufficient time to place restrictions on travel routes before the permit writers begin issuing permits that could be used after the clearance change. For instance, if the permits branch approves a 5-day permit 3 days in advance, it would need at least 8-days' advance notice of any roadway changes.

Another example of a discrepancy between the 1997 policy and a reporting program's policy involves the Maintenance program, which did not clearly specify when a clearance change should be reported or who was responsible for reporting it. Table 1 describes the old and new reporting requirements for each program.

TABLE 1

Comparison of Old and New Policies for Reporting Roadway Conditions

Reporting Unit	Function	Old Policies		New/Draft Policies	
		Responsible Position	Procedures	Responsible Position	Procedures
Construction program	Builds roads, bridges, overpasses, and underpasses	Resident engineer	<p>Changes to report: Changes in vertical and horizontal clearances</p> <p>Reporting time frame: 1-2 weeks before making a change</p> <p>Report to: Permanent changes to the Office of Structures Maintenance and Investigations and temporary changes to the district permits office</p>	Resident engineer	<p>Changes to report: Changes in vertical and horizontal clearances</p> <p>Reporting time frame: 15 days before making a change</p> <p>Report to: The transportation permits office</p>
Maintenance program	Maintains and repairs roadways and bridges on the state highway system	Not identified	<p>Changes to report: Changes in vertical clearance that result from placing additional surfacing</p> <p>Reporting time frame: Not specified</p> <p>Report to: The district permits section</p>	Maintenance area superintendents and supervisors	<p>Changes to report: Changes that result from deck resurfacing and changes in vertical clearance that result from placing additional surfacing material</p> <p>Reporting time frame: At least 15 days before work is performed</p> <p>Report to: The regional transportation permits liaison</p>
Traffic Operations program	Reviews and approves applications for encroachment permits	District encroachment permit engineer	<p>Changes to report: Changes in vertical and horizontal clearances caused by encroachment permittees</p> <p>Reporting time frame: At least 15 days before making a change</p> <p>Report to: Encroachment permittee should notify the regional transportation permits liaison*</p>	District encroachment permit engineer	<p>Changes to report: Changes in vertical and horizontal clearances caused by encroachment permittees</p> <p>Reporting time frame: At least 15 days prior to the change</p> <p>Report to: The regional transportation permits liaison</p>
Office of Structures Maintenance and Investigations	Inspects bridges	Bridge load rating engineer	<p>Changes to report: Changes to bridge load ratings</p> <p>Reporting time frame: As soon as changes are known</p> <p>Report to: The regional transportation permits liaison</p>		(currently being developed)

* The procedures for the Traffic Operations program are from the 1997 Traffic Operations policy.

Reporting Programs Have Not Always Followed the Policy for Reporting Roadway Changes

According to various Caltrans staff, the reporting programs, including Traffic Operations, have not always followed the 1997 policy. The 1997 policy defines both temporary and permanent changes in vertical and horizontal clearance. Temporary clearance restrictions include temporary bridges, placement of concrete barriers, lane shifts, detours, lane closures, realignments of ramps, and the installation of wooden framework used to form concrete. Permanent clearance changes include pavement overlays under bridges and ramps, erection or modification of sign structures, seismic retrofit modifications, and construction of new structures. The procedures for reporting these changes clearly state that those responsible for reporting should notify the regional liaison 15 days in advance.

Because not all roadway changes are reported to the permits branch, the regional liaisons must gather information from other sources.

However, some of these changes, such as planned lane and ramp closures, must also be reported to a district traffic manager, who is responsible for coordinating traffic flow within a district and must receive lane and ramp closure information in advance of the actual event. Rather than report these closures to both the district traffic manager and the regional liaison, those responsible sometimes do not report them to the regional liaison. As a result, the regional liaisons must gather information from other sources, such as district Web sites where district traffic managers post approved lane and ramp closures. Moreover, because district traffic managers use a shorter time frame for receiving the closure information, the information is not available 15 days in advance, so regional liaisons do not have enough lead time to ensure that permits are issued for appropriate travel routes.

Because Caltrans does not collect data on roadway changes that are reported late, we asked permits branch staff to provide us with two examples, as they occurred, in which the regional liaison did not receive timely information about roadway changes. In one example, the city of Turlock closed the on- and off-ramps to a state highway for a local improvement project, but personnel did not inform the regional liaison of the ramp closures. Instead, on March 3, 2000, the Caltrans district office posted information regarding the ramp closure to its public Web site, explaining that the city of Turlock was beginning an improvement project that required the ramps to be closed in both directions for more than three months beginning the week of March 7. According to the northern regional liaison, this information was not available to him until it first appeared on

Regional liaisons do not have enough lead time to update the routing database for lane closures when information is not reported 15 days in advance.

the district's Web site. As a result, the liaison was not able to update the routing database in time to prevent permit writers from issuing permits for travel on routes that included the closed ramps. For example, because most permits are valid for five days after the issue date, a permit might have been issued on March 3 to a driver who planned to use one of the ramps on March 7. That driver would have found the ramp closed and would then have been faced with a decision to pull off the roadway, if possible, or use the next off- or on-ramp, even though it was not on the approved route.

In the second example, personnel did not notify the regional liaison about planned lane closures. On March 13, 2000, Caltrans temporarily closed the northbound and southbound lanes and a common center left-turn lane on a state highway for a construction project. The proposed lane closures had been reported to a district traffic manager but not to the regional liaison. A Caltrans permit writer who was on his way to work discovered the lane closures that morning. The permit writer warned the construction crew that the permits branch had issued permits for four trucks carrying heavy equipment to travel through the construction site beginning that day. The four permits required two pilot cars to accompany each truck and a California Highway Patrol escort. Pilot cars drive either behind or in front of an oversize vehicle to warn approaching traffic of a slow-moving vehicle or to warn the truck driver of any unexpected events or obstacles along a route. Because the extra width of the loaded trucks required the use of both the through lane and the center lane, which was closed, the construction crew had to remove and replace all of the construction cones to allow the trucks room enough to pass. In this instance, a Caltrans employee helped prevent what might have been a hazardous situation at worst and a lengthy traffic delay at best.

Caltrans Does Not Collect Adequate Data Regarding Incidents

Although this lack of timely information poses a potentially high risk to public safety and the highway infrastructure, the extent of the problem is unclear because of deficiencies in Caltrans' data collection. Caltrans does not track the number of roadway changes that were reported after the fact by truck drivers, the public, or other Caltrans employees, nor does it track changes that were reported late by those responsible. To track these changes, Caltrans would have to set up a manual system. As a result, Caltrans cannot document patterns in the

types and causes of untimely information. Moreover, Caltrans' current computer system does not allow it to identify all the erroneous permits and related incidents that may have resulted from late or unreported roadway changes. Responding to a request from the Legislature, Caltrans has identified 30 instances from January 1996 through March 2000 in which a truck hit a bridge as a result of permit-writer error or inaccurate data in the routing database. In April 2000, another such accident occurred, bringing the total to 31 since 1996. However, Caltrans does not have data regarding other types of incidents that resulted from erroneous permits. For example, it does not know the number of permitted trucks that had to be rerouted because the routing information used to issue their permits was inaccurate.

Caltrans Has Taken Steps to Address the Causes of Inadequate Communication

Caltrans' reporting units are developing new policies for reporting roadway changes to the permits branch.

Partly to improve the quality of the roadway information its permits branch uses, Caltrans submitted a Finance Letter, or funding request, to the Department of Finance in February 2000 requesting nine additional staff to coordinate communication between the personnel who are responsible for reporting roadway changes and the two regional liaisons. Caltrans proposed to have the additional staff working at the district offices, gathering information about roadway changes from all these personnel and transmitting the information to the regional liaisons. Some of the new staff would be responsible for more than one district. This would allow the two regional liaisons to deal with only nine sources of information regarding roadway changes, rather than hundreds. Further, because these new permits branch staff would be working at the district offices, they would have a greater familiarity with the ongoing and planned projects in their districts. They would also be able to standardize the format of information sent to the regional liaisons. However, the Department of Finance denied Caltrans' request for the additional staff, stating that Caltrans had not adequately justified the need for more staff because it had not analyzed staffing requirements or demonstrated urgency.

Caltrans is also working to develop new policies for each of the four units that report roadway changes to the permits branch. Recently, the Construction program approved a new reporting policy that identifies the types of changes that should be reported, indicates who is responsible for reporting the changes, and provides specific procedures for reporting to the regional liaison within the required 15 days. The Maintenance program

has drafted a new policy, but it does not clearly specify all of the types of changes that should be reported. The Traffic Operations program has also drafted a new policy that appears to adequately address all necessary issues, including what should be reported, who is responsible for reporting, and how and when information should be reported. Table 1 (page 15) shows the requirements of the old policies and these new policies. According to its chief, the Office of Structures Maintenance and Investigations is developing a draft policy.

Caltrans has also proposed acquiring a new computer system that will allow the permits branch, once it becomes aware that a roadway is obstructed, to identify all oversize vehicles routed to that section of the roadway. This would allow the permits branch to notify trucking companies of changes that occurred after a permit was issued. The system should also be able to identify the number of permits that Caltrans has to rewrite because it receives reports of changes in the roadway after issuing the original permit. We discuss the proposed system in more detail in a later section.

Caltrans Units Need More Clarification on What Changes to Report

Although Caltrans is in the process of developing new policies for reporting roadway changes, policies alone do not ensure clear communication and understanding of expectations. The draft policies generally follow the guidelines of the 1997 policy as to the timing and assignment of responsibility for reporting, but without clear communication and understanding and enforcement of the policies, the new policies will not be effective, and some of the same communication problems will continue. During interviews with two high-level Caltrans staff from one of the reporting units, we became aware that there is still some disagreement about the types of roadway changes that the new policies cover. For example, the background section of the draft policy for the Maintenance program describes types of changes; however, because the new reporting procedures do not clearly require all the types of changes to be reported, they allow for different interpretations of what changes should be reported. The permits branch staff, however, believes that all of the changes identified in the background section are required to be reported. Unless all of the units agree on the changes that should be reported, the permits branch will continue to lack the information it needs to ensure that the routes it approves are appropriate.

For the permits branch to have all the information it needs, each reporting unit must understand what changes should be reported.

Flawed Implementation Has Hindered Past Improvement Efforts

Although Caltrans is currently addressing the communication problems it has with the permitting process, this is not the first time it has noted these problems. Its Traffic Operations program anticipated communication problems between the districts and the permits branch when it proposed reorganizing the program in 1994. At that time, the Traffic Operations reorganization plan discussed the risk of losing local knowledge by regionalizing the permits function. To address this concern, the 1994 reorganization plan proposed using 10 full- or part-time positions in a liaison capacity similar to the district coordinator positions that the Department of Finance denied in March 2000. The 1994 reorganization plan also proposed using five positions to double-check permits for routing accuracy. At that time, all of these positions were to be drawn from existing resources. The Caltrans director approved and signed the reorganization plan.

Caltrans did not fully implement its 1994 reorganization plan that would have addressed some of our current concerns.

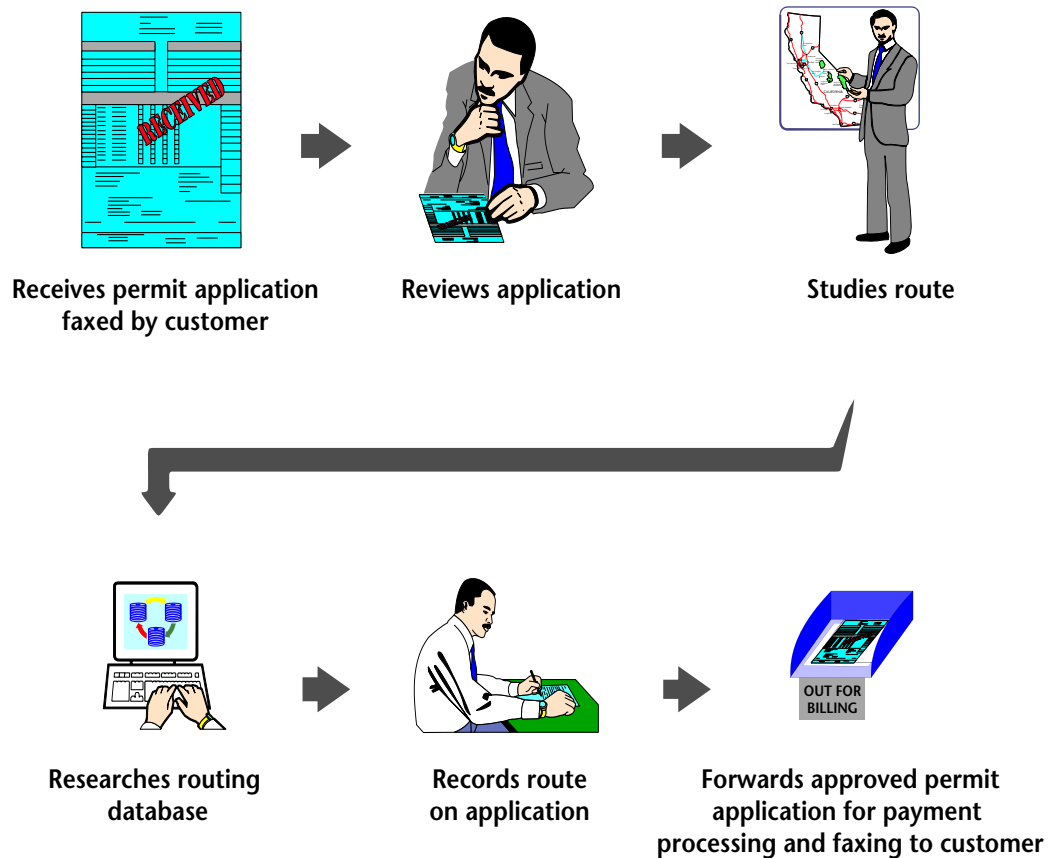
According to Traffic Operations, the 10 liaison positions were intended to be temporary. However, the permits branch was not able to use the temporary positions as planned because the volume of permit applications increased substantially when the permits branch began accepting applications via fax. To address the increased workload, Traffic Operations reduced the number of liaisons from 10 to 2—1 in each regional office—and redirected the 8 remaining liaison positions to permit writing or to other areas within Caltrans. Moreover, according to Traffic Operations, the permits branch made several attempts to increase the number of permit writers through redirection from other areas, but it received only five additional permit writers in the four years from fiscal years 1995-96 to 1998-99. However, according to Traffic Operations, five additional staff were not enough to allow the permits branch to follow through with its plan to use staff to double-check permits for accuracy.

CALTRANS' CURRENT SYSTEM FOR ISSUING OVERSIZE PERMITS DOES NOT EFFICIENTLY USE RESOURCES OR ADEQUATELY PROTECT PUBLIC SAFETY

In addition to the communications problems discussed in the previous sections, Caltrans' current permit-writing process is labor-intensive and susceptible to human error. The result is an inefficient use of resources, an increased potential for routing errors and accidents, and a turnaround time that does not meet

FIGURE 5

Typical Permit Approval Process Used by Permit Writers



the trucking industry’s needs. Although it has developed a proposal for a new automated system that will address most of these issues, it is still waiting for approval from the Governor’s Office. Furthermore, even if a new system is approved, Caltrans must continue to use its current system until the new system is fully functional. Moreover, Caltrans’ time line for implementing a new system is overly optimistic.

Caltrans’ Current Permit-Writing Process Is Labor-Intensive and Susceptible to Error

The current permit-writing process is labor-intensive. Except for using a computerized routing database to check or “clear” routes, permit writers process and review most permits manually. For example, most applicants handwrite the permit application and fax it to the appropriate regional office. As Figure 5 illustrates, the permit writer manually reviews the

permit application, using maps and the routing database, and either approves or rejects the application. It may be necessary for the permit writer to contact the applicant for clarification. The permit writer manually records the approved route and pilot car requirements on the permit document, signs it, and forwards it to support staff, who process the payment for the request and fax the permit back to the applicant. Not only is this manual process time-consuming, it increases the risk of routing errors from transcription mistakes during the recording process or from a driver misreading an illegibly written permit. It also increases the opportunity for differences in uses of abbreviations, wording, and terminology among the permit writers.

Since Caltrans adopted the procedure to double-check all overheight permits, time to process permits has significantly increased.

Another labor-intensive aspect of the current system is the practice of double-checking all overheight permits. Because the system does not have electronic controls that prevent the issuance of erroneous permits, a second permit writer double-checks all overheight permits. Although this practice reduces the likelihood that Caltrans will contribute to another fatal accident, performing this function manually is an inefficient and costly use of resources. For example, Caltrans estimates that on a typical day during its busy season, approximately 48 percent of the South Region's permits and 45 percent of the North Region's permits involve overheight loads and thus must be double-checked. Moreover, Caltrans' average permit turnaround time has significantly increased since it adopted the double-check procedure. This added delay may increase the trucking industry's costs of doing business and thus could lead to a greater incidence of "bootlegging," or operating without a permit.

Caltrans' current permit-writing process also makes the process susceptible to human error because it lacks adequate controls to ensure that permits are free of errors. According to Caltrans, by compounding errors in information that a trucker provided, a permit writer contributed to the fatal accident in July 1999. The permit writer inadvertently overlooked a vertical clearance flag on the computer screen because his attention was diverted to other important on-screen information. Caltrans addressed this issue by adding a warning screen to its routing database system. For example, the routing database system compares the loaded height and weight (including the number of tires per axle, axle width, and axle spacing) of an oversize load to state highway vertical clearances and bridge load capacity ratings. If there is a conflict, it provides warnings of potential vertical clearance problems or excessive load capacities for bridges. However, the

new warning screen does not prevent permit writers from approving erroneous permits. A permit writer might inadvertently override a warning screen and issue a permit for a route that is not appropriate for the vehicle or its load.

In addition, the database does not provide automated warnings for width, length, overhang conflicts, or escort requirements. Consequently, permit writers must manually compare the load's width, length, front and rear overhang, kingpin-to-rear-axle measurements, and escort requirements (pilot car or California Highway Patrol) indicated in the handwritten information on the permit application to the information in the routing database regarding the requested route. A mistake in comparing any of these dimensions could lead to the issuance of an erroneous permit.

Further, because the routing database does not create an archived record of the routes on issued permits, permit writers cannot query it to identify a route from a previously written permit or determine the number of permits written that call for travel on a particular segment of highway or under a certain structure. For example, if the permits branch learns of a vertical clearance restriction on a bridge after it has already authorized vehicles to travel under that structure, it cannot electronically identify how many permits were issued to drivers whose vehicle or load could now hit the structure. Consequently, other than relying on permit writers' memories, Caltrans does not have an effective way of identifying and averting potential accidents caused by communication breakdowns. Because permit writers each process an average of 29 permits per day, it is unrealistic to expect them to have a clear recollection of all the permits approved for a given route.

Permit writers cannot query the routing database to identify routes for which they issued permits that, due to more recent roadway changes, are no longer valid.

Finally, mistakes can arise because Caltrans is not actively enforcing its policy of requiring permit applicants to use its standard application forms. Currently, it accepts modified forms from its customers. Differences in these forms make them more difficult for permit writers to review. For example, two forms we observed added or omitted informational check boxes. One of the boxes that was omitted is used by permit writers to indicate that a pilot car was not needed. Other boxes were added to provide information for the customer's use and could be distracting to a permit writer. Another form had less noticeable but more problematic differences, such as reversing critical informational boxes or using symbols incorrectly. For example, a permit writer might inadvertently mark a pilot car box "no"

rather than “yes” when a pilot car is required because a nonstandard application reverses the “yes” and “no” boxes, or a driver might be confused by the use of different symbols to indicate when local permits are required. These differences add to the time needed for permit review as well as increasing the risk of errors and misunderstanding.

Caltrans’ Proposed New System Should Improve Its Permit-Writing Process, but It Has Not Yet Been Approved

To address concerns with its permit-writing process, Caltrans has taken some steps, including recently requesting and receiving 15 additional staff for its permits branch and implementing a statewide bridge measurement project, in addition to those already discussed. Caltrans has also requested approximately \$13.2 million, including \$12 million for one-time costs and \$1.2 million in ongoing costs, to develop and maintain an automated routing system to improve public safety and efficiency. To ensure that the new system will meet all of its needs, Caltrans has developed a number of detailed technical and functional requirements that bidders must meet as part of their proposed business solution. For example, a bidder must demonstrate that the proposal offers a solution to each requirement, show that each solution meets the needs associated with the requirement, list specific tasks the bidder will perform to achieve the results outlined in the solution, and explain how any claimed financial or cost benefits will actually benefit Caltrans.

If approved and built as specified, Caltrans’ proposed automated routing system should provide a safer, faster, and more efficient system for issuing oversize permits. The control features, such as indicators of potential routing conflicts, automated permit review that will validate the appropriateness of a chosen route, and enforced completion of mandatory fields on the computer screen, should improve public safety by reducing the risk of issuing erroneous permits. These features should also eliminate the need to manually double-check overweight permits, making the permit-writing process less labor-intensive. The automation features, including electronic permit evaluation and generation, should greatly improve efficiency by allowing permit writers to focus on more complex applications. Finally, the permit identifier and archiving features should improve public safety, efficiency, and customer service by allowing permit writers to track permits in process and to access historical permit data. This

The proposed automated routing system should provide a safer, faster, and more efficient system for issuing oversize permits.

would provide Caltrans with the data it needs to track erroneous permits and determine whether they are the result of late or unreported information, permit-writer error, or some other cause.

Although Caltrans' proposed automated routing and permitting system should improve public safety and efficiency once it is fully operational, it is not clear when this will occur. First, funding for the new system must be approved by the Governor's Office. In early February 2000, Caltrans submitted a request for funding to the Department of Finance asking for the automated system. In March, a representative of the Department of Finance indicated his department's intent to carry the request to the Governor's Office for approval during the State's fiscal year 2000-01 budget cycle. Caltrans also submitted a request for proposals (RFP) to the Departments of Information Technology, Finance, and General Services for approval. The RFP was approved for release in mid-April and, in anticipation of approval of funding, Caltrans released the RFP to bidders.

Caltrans' schedule for implementing its new system seems overly optimistic.

Caltrans has an ambitious schedule for the implementation of a new system should the funding be approved. Explaining that public safety is affected by permit errors, Caltrans has set its goal to have the new system in use as soon as possible. It anticipates this will occur by mid-June 2001, but meeting this goal will also depend on responses from bidders on the RFP. Because Caltrans has already encountered some obstacles in getting approval for a new system, and the RFP contains many complex and sophisticated features, we believe this goal may be overly optimistic. It is difficult to anticipate the types of problems that might be encountered during the development phase or to know how the system will perform when in production. It will also be necessary to operate the new system concurrently with the old system for some period of time until it is clear the new system is functioning properly.

Personnel Issues May Hinder Caltrans' Attempts to Improve Its Permit-Writing Process

Although Caltrans is taking steps to improve its permit-writing process, personnel issues, including insufficient training and high turnover, could impede progress. According to certain permits branch staff we interviewed, Caltrans does not provide enough training in certain important areas for its new permit writers, nor does it provide formal ongoing training or a refresher course for its experienced staff. Currently, Caltrans

gives new permit writers a two-day training class that covers the basics of writing a permit and discusses the California Vehicle Code as it pertains to oversized loads. Although we believe this class provides a foundation for new permit writers in California's laws and regulations regarding oversized loads, it does not include instruction in how to use pilot car maps, which help a permit writer determine when a pilot car is needed, or how to use the routing database.

Historically, Caltrans has relied on experienced permit writers to train new staff in most aspects of the permit-writing process. Although the permits branch staff we interviewed believe this system of on-the-job training works well for helping new permit writers learn how to route difficult loads, a basic training class covering the use of pilot car maps and the routing database would allow experienced permit writers to spend less time on basic training and more time on the more challenging, contextually specific aspects of the job, such as efficiently routing very large loads through congested areas. This need for more training classes is particularly heightened during the peak season when veteran permit writers are busy managing their own workload. A basic course in the use of the routing database would also help standardize aspects of the job by providing new permit writers with the same user information, regardless of which experienced permit writer gave them on-the-job training.

Newly hired permit writers do not receive enough formal training and experienced staff do not receive ongoing or refresher training.

Caltrans also does not have standardized procedures for writing a permit, nor does it train its staff in the use of standard terminology. According to several sources in the permits branch, not all permit writers always use the same abbreviations and wording to describe an approved route on a permit. Consequently, drivers and even other permit writers may have difficulty understanding routing instructions. Developing a standard set of procedures and terminology and training its staff to use them would allow Caltrans to reduce stylistic and methodological differences among individual permit writers and between the two regions.

Training will become even more important for the permits branch if Caltrans' proposed new system is approved. Permit writers will need comprehensive training in the use of the automated features of the new system. As part of its RFP for a new system, Caltrans requires each bidder's proposal to include training for its staff.

High turnover among permit writers could hinder Caltrans' ability to provide on-the-job training for new permit writers.

Another issue that can affect Caltrans' ability to improve its permit-writing process is high turnover among permit writers. As Table 2 indicates, the permits branch lost approximately one-third of its permit writers in 1998 and again in 1999. As experienced permit writers leave, Caltrans' ability to provide sufficient on-the-job training for its new permit writers is reduced, thus increasing the risk that permit errors can occur. As we mentioned previously, the more challenging aspects of the permit-writer's job may be best learned one-on-one from an experienced permit writer, rather than being taught in a class or distilled into a training manual.

TABLE 2

Annual Turnover Among Permit Writers

Calendar Year	Turnover Rate
1996	13.3%
1997	20.0%
1998	38.7%
1999	32.3%

Source: Caltrans permits branch.

Although many external factors might be contributing to high turnover, one internal factor may be a job classification that is no longer appropriate. Permit writers are classified as Transportation Engineering Technicians (TETs), a category that requires certain technical skills and knowledge of transportation engineering principles that do not appear necessary for permit writers. According to the chief of the Office of Truck Services, before the reorganization of the Traffic Operations program in 1995, the permits function was located in Caltrans' district offices, and the employees writing the permits also performed planning and engineering tasks. Consequently, the TET classification came closest to encompassing the job, even though the California State Personnel Board specifications for TETs do not mention permit writing. Now that the permit-writing function has been regionalized, however, permit writers no longer perform planning and engineering tasks. As a result,

there is currently little or no overlap between the tasks outlined in the TET specifications and the tasks performed by regional permit writers.

For example, permit writers perform tasks such as researching proposed routes, analyzing permit applications and load dimensions, coordinating with local agencies, and recording approved route and pilot car requirements. These tasks require analytical and organizational skills. In contrast, the TET classification calls for performing tasks such as setting up and operating precision survey instruments, keeping survey and construction notes, and inspecting plans and specifications on highway and bridge construction projects—tasks that require technical skills or knowledge of transportation engineering principles.

This use of the TET classification may be affecting Caltrans' ability to hire and retain permit writers. For instance, permit writers may be using the TET classification as a stepping-stone to other positions within Caltrans, rather than intending to stay in the job. This classification may also be limiting Caltrans' hiring pool for permit writers because some who want the position may not meet the qualifications for the TET classification and some holding the TET classification may not be interested in a nontechnical position. Caltrans has noticed this problem, but it has not decided what to do about it.

Because it continues to use an outdated job classification for permit writers, Caltrans may be limiting its candidate pool.

RECOMMENDATIONS

To improve communication of roadway changes to its permits branch, Caltrans should do the following:

- Designate district staff to coordinate communication between the permits branch and personnel working in the field.
- Require district communication coordinators to work with the regional liaisons to develop a standard reporting format.
- Establish a process and designate a position with authority to enforce the reporting policies. If personnel do not adhere to these policies, Caltrans should tie reporting to performance evaluations.

- Ensure that its policies clearly and consistently specify the types of roadway information that must be reported to the permits branch.
- Ensure that these policies are clearly communicated to those who have responsibility for implementing them.

To improve its system for issuing travel permits for oversize vehicles, Caltrans should do the following:

- Develop an automated routing system. If the current request for an automated routing system is not approved, Caltrans should seek approval again in the next budget cycle. A new request should include an analysis of staffing requirements and should also identify what the funding source would be.
- Track and compile statistics on permit errors and use the information to identify problem areas.
- Develop a standard format for permit writing.
- Require that customers use the standard permit application form.

Finally, to ensure that permit writers are properly qualified and trained, Caltrans should take the following steps:

- Expand training for new permit writers to include instruction in standardized permit writing, use of pilot car maps, and use of the routing database.
- Assess the training needs of experienced permit writers and develop an ongoing training program.
- Consider using a different classification for permit writers that better reflects the skills and qualities required in the permit-writer job.

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 government auditing standards. We limited our review to those areas specified in the audit scope section of this report.

Respectfully submitted,

A handwritten signature in black ink that reads "Mary P Noble". The signature is written in a cursive, slightly slanted style.

MARY P. NOBLE
Acting State Auditor

Date: May 31, 2000

Staff: Lois Benson, CPA, Audit Principal
Debra L. Maus, CPA
Miles L. Burnett, Ph.D.

Agency's comments provided as text only.

Business, Transportation and Housing Agency
980 9th Street, Suite 2450
Sacramento, CA 95814-2719

May 17, 2000

Mary P. Noble
Acting State Auditor
Bureau of State Audits
555 Capitol Mall
Sacramento, CA 95814

Dear Ms. Noble:

Attached is the Department of Transportation's (Caltrans) five-day response to the Bureau of State Audits' (BSA) May 11, 2000, draft audit report, *California's Department of Transportation: Has Improved Its Process for Issuing Permits for Oversize Trucks, But More Can Be Done*. Thank you for your attention to this very important function, the opportunity to respond to the draft report, and the time extension to respond.

Caltrans concurs with the BSA's findings and recommendations. One of our primary objectives within the scope of our responsibilities is to ensure the continued ability of the general public and commercial carriers to travel safely over California's roadways and bridges. In response to recent bridge-hit accidents, I directed Caltrans to redirect resources to provide additional verification of route data to address our short-term, or more immediate, needs. As the report notes, our long-term approach includes implementation of an automated system that would reduce human error and provide a means of tracking road and bridge construction data as well as permit information. This proposal has been approved by me and is being pursued through the state budget process.

In my experience, Caltrans employees have demonstrated that they take very seriously their responsibility to identify and report potentially dangerous road conditions. Considering the number of projects underway, it is not surprising to me that BSA audit staff identified a high number of Caltrans personnel who report to the permit office staff problems or changes in construction plans. I agree that the reporting process needs to be coordinated to ensure that the permit offices can manage and initiate action on all incoming reports.

Mary P. Noble
May 17, 2000
Page 2

The BSA recommendations will be very helpful in addressing the current and future needs of this function. If you need additional information, please do not hesitate to contact me, or Michael Tritz, Chief of the Office of Internal Audits within the Business, Transportation and Housing Agency, at (916) 445-7976.

Sincerely,

(Signed by: Maria Contreras-Sweet)

MARIA CONTRERAS-SWEET
Secretary

Agency comments provided as text only.

Department of Transportation
Office of the Director
1120 N Street
Sacramento, CA 94273-0001

May 16, 2000

MARIA CONTRERAS-SWEET, Secretary
Business, Transportation and Housing Agency
980 - 9th Street, Suite 2450
Sacramento, CA 95814

Dear Secretary Contreras-Sweet:

It has nearly been one year since the accident of July 16, 1999, that resulted in the death of a motorist at the Route 57/91 Interchange in Orange County. Since this accident, Caltrans has developed and is currently implementing a comprehensive program to improve public safety.

We appreciate the opportunity to work with the Bureau of State Audits (BSA) about improving the permit process. The audit's findings and recommendations confirm and validate the department's efforts that have resulted in identifying problems and developing and implementing solutions to enhance public safety.

Improving the transportation permits process is one of the highest priorities of Caltrans. The safety of the traveling public is the most important consideration in issuing these permits.

The Audit report identifies and recommends many changes in the Transportation Permits function. It also recognizes many steps the Department has taken to identify and correct the issues and problems. The following is a list of activities the Department believes will improve the safety of the permittees and the traveling public.

Caltrans:

- Has made numerous enhancements and modifications to the existing routing database system to reduce the number of routing errors.
- Began double-checking all permit requests with loads higher than the legal limit of 14'-0" immediately after the accident on July 16, 1999.

- Has requested funding to install a new automated routing system to replace the current manual based permit issuance system.
- Is working with the industry to determine ways to continue to improve safety as related to permits.
- Continues to establish policies that will aid in enforcing prompt and effective communication between Transportation Permits and various units reporting changes on the highway system.
- Is also establishing Truck Safety Liaison positions in Districts to facilitate communication of reporting changes to the highway system that impact routing of oversized vehicles.

Caltrans will adopt the following recommendations addressed in the California State Auditor’s report:

1. To reduce the number of staff reporting roadway changes to the two regional liaisons, Caltrans should designate district staff, to coordinate communication between the permits branch and personnel working in the field. It should also establish a process that holds accountable those who do not comply with reporting policies.
2. To ensure that the database of roadway information is consistently updated with timely and accurate information, Caltrans should clearly communicate to all responsible parties its policies and procedures regarding the types of roadway information that must be reported.
3. To improve its process for writing permits for oversized vehicles, Caltrans should develop an automated routing system. If its current request for an automated routing system is not approved, Caltrans should seek approval again in the next budget cycle. In its new request, it should include an analysis of its staffing requirements and should identify what the funding source would be.
4. To ensure that permit writers are properly trained, Caltrans should expand training for new permit writers, develop an ongoing formal training program for experienced permit writers, and consider using a different classification for permit writers that better reflects the skills and qualities required in the permit writer job.

To add clarification to the report, I suggest the following changes:

- ①* 1. In the Summary section, page 1, second paragraph, and first sentence change from, “In fiscal year 1998-99, the permits branch issued approximately 186,000 permits” to

*California State Auditor’s comments appear on page 37.

read “For the period January 1996 through April 2000, the permits branch issued approximately 700,000 permits.” This change reflects the same time period during which the 31 accidents occurred.

2. In the Summary section, page 2, first full paragraph, and first sentence delete “by Caltrans.” The audit identified poor communication. ①
3. In the Summary section, page 2, first full paragraph, and last sentence change from “erroneous permits that have led to incidents other than accidents” to read “erroneous permits that may lead to incidents other than accidents.” This change reflects a less direct approach. ①
4. In the Summary section, page 4, second full paragraph, and last sentence change from “It should also establish a process that holds accountable those who do not comply with reporting policies” to “It should also establish a position to hold accountable for not complying with reporting policies.” ①
5. In the Introduction section, page 6, first paragraph, and second sentence change from, “24,000 bridges” to read “approximately 12,000 bridges on the state highway system.” We are responsible for approximately 12,000 bridges on the state highway system. ②
6. In the Introduction section, page 6, second paragraph, and first sentence should be changed to read, “As an agency responsible for approving oversize permits on the state highway system, Caltrans faces...” We are responsible for approving oversize permits only on the state highway system. ①
7. In the Introduction section, page 7, first partial paragraph, and first sentence should be changed to read, “Balancing these demands has become increasingly difficult as the State faces increased traffic congestion from population growth, the need to maintain and re-construct an aging system, and construction of additional highways...” Our functions also include the maintenance and re-construction of aging highways. ③
8. In the Introduction section, page 7, first partial paragraph, and last sentence change from, “At the same time, some truckers” to read “Even though the law requires all oversized loads to obtain valid permits, some truckers...” followed by “The monitoring of transportation permits is the responsibility of law enforcement agencies.” This is to clarify that law enforcement agencies monitor transportation permit compliance for oversized loads. ①
9. In the Introduction section, page 8, first partial paragraph, and last sentence change from “These permits are normally good for five days, with travel restricted to normal workdays and daylight hours.” To read “These permits are normally good for five days, with travel restricted to times and days of the week specified on the permits.” ③

- ① 10. In the Introduction section, page 8, second paragraph, and third sentence delete the phrase “and Public Affairs Offices” since Transportation Permits does not rely on this function to report roadway changes such as lane and ramp closures. There are no examples or other references made to this function in the report.
- ① 11. In the Audit Results section, Figure 4, delete reference to “Project Managers” and “Public Affairs Offices.” Also change “Office of Structures Maintenance and Investigation” to read “Division of Structures Maintenance and Investigation.” Project Managers and the Public Affairs Offices do not report road changes to the Permits Branch.
- ① 12. In the Audit Results section, page 13, first full paragraph, and first sentence delete “and Structures Maintenance and Investigations” since this function does not make or report highway changes to Transportation Permits.
- ④ 13. In the Audit Results section, page 14, second full paragraph, and second sentence change from, “often written” to read “infrequently written.” Few permits in the southern region are written 3 days or more in advance and it is not a practice in the north region.
- ① 14. In the Audit Result section, page 21, second paragraph, and third sentence delete reference to Governor’s Office. The Department of Information Technology (DOIT) has final approval on the proposed automated transportation permit system.
- ① 15. In the Audit Results section, page 28, second full paragraph, and first sentence, change from “also does not have standardized procedures for writing a permit” to read “does not have written standard procedures, however non-written procedures are relayed through on-the-job training, which provides historically developed methodology for writing permits.” Caltrans has informal procedures and methodology for writing permits.

If we can provide any further information, or if you have any questions, please do not hesitate to contact me at 654-5791.

Sincerely,

(Signed by: Tony Harris)

TONY HARRIS, Acting Director
Department of Transportation

COMMENTS

California State Auditor's Comments on the Response From the Department of Transportation

To provide clarity and perspective, we are commenting on the Department of Transportation's (Caltrans) response to our audit report. The number corresponds to the number we placed in Caltrans' response.

- ① After considering Caltrans' suggestion, we believe that clarification is not necessary either because our point was made clearly in another part of the report, the statement is accurate as stated, or the wording in the draft report was changed as a result of our internal edit process. Therefore, no modification was made to the report.
- ② We based our statement on publicly distributed information from the Caltrans Maintenance Program's Web site. Nevertheless, we have changed the number of bridges to "over 12,000," as Caltrans requested.
- ③ After considering Caltrans' suggestion, we agreed to reword the sentences.
- ④ We based our statement on conversations with permit writers and other permits branch staff and the fact that Caltrans has continued to require 15 days notice of roadway changes. Nevertheless, we have amended the wording to, "some permits are written in advance." After Caltrans had submitted its response to this report, it retracted its statement that writing permits in advance is not a practice in the Northern Region.

cc: Members of the Legislature
Office of the Lieutenant Governor
Milton Marks Commission on California State
Government Organization and Economy
Department of Finance
Attorney General
State Controller
State Treasurer
Legislative Analyst
Senate Office of Research
California Research Bureau
Capitol Press