Report No. 95-19 September 1995

OVERVIEW

THE AUDITOR STATE OF HAWAII

Audit of the Temporary Classroom Program

Summary

The State Auditor initiated this audit to review the timeliness, efficiency, and cost of the temporary classroom program.

To meet shifting school population needs, approximately 60 temporary wood classrooms are constructed each year at a cost of about \$4 million. The Department of Education (DOE) determines the number and locations of the temporary classrooms and the Department of Accounting and General Services (DAGS) is responsible for their design and construction. The governor approves the allotment of funds for design and construction after the Department of Budget and Finance (B&F) reviews the allotment request.

We found that the process entails unnecessary analysis and reviews by B&F and approvals by the governor. The temporary classroom program is repeated every year without significant variation and the analysis and review required for design allotment and permission to advertise were unwarranted. The redundancy adds almost two months to the time needed to complete the classrooms.

Engineering consultants were employed for every temporary classroom regardless of design complexity or lack thereof. Typically, the temporary classroom requires a simple connection to existing electrical and mechanical utilities that could be designed by the licensed contractor or DAGS' own staff. The cost of engineering consultants added \$429,000 to the cost of 104 temporary classrooms this past fiscal biennium.

The four to six-week selection process for consulting engineers is time consuming and inefficient. The process requires three DAGS staff to review and recommend three finalists. This process is repeated for each temporary classroom subproject.

We also found that alternative delivery methods and construction technologies were not seriously considered by DAGS. Design-build construction and modular classrooms are two possible alternatives that could be explored. We estimated the State could have saved about \$10 million over the past eight years if modular classrooms had been used.

Recommendations and Response

We recommend that DAGS and B&F streamline the approval process for the allotment of design funds and the permission to advertise for temporary classroom projects. We also recommend that DAGS reduce the use of engineering consultants



by using staff electrical and mechanical engineers as appropriate. In addition, we recommend that DAGS consider using the revolving list method for the selection of qualified engineering consultants for temporary classroom projects.

Finally, we also recommend that DAGS and DOE explore alternative cost effective methods and technologies to fulfill the need for temporary classrooms.

The Department of Education expressed its satisfaction with the report and generally concurred with our recommendations.

The Department of Budget and Finance responded to our recommendation to streamline the approval process by stating it has begun to combine the permission to advertise with the allotment request for construction funds. We believe the process could be streamlined even further by limiting the review and approval process now followed for the release of design funds for these classrooms.

The Department of Accounting and General Services is in general agreement with some of the recommendations and has implemented some changes. It also states that the design allotment approval procedure has been shortened. The selection process for consulting engineers will be shortened by using a pre-qualified list. And, lastly, a pilot project using alternative materials is being pursued. It responded also that it pursued the use of modular classrooms in 1988 and 1989 to no avail. This does not directly address our recommendation to consider using modular or pre-fabricated structures, nor does it take into account the successful use of modular classrooms nationally, by private local schools, and by the public school system on Kauai after Hurricane Iniki.

DAGS does not agree with our recommendation that it use its own electrical and mechanical engineers for temporary classrooms. It states that its design branch does not have electrical or mechanical engineers on its staff and says that "The total amount of electrical and mechanical design work throughout the year does not justify the hiring of full time electrical and mechanical engineers."

We believe DAGS should rethink this issue. Since consulting engineering fees amounted to \$429,000 for the fiscal biennium 1993-95, DAGS should examine cost effective alternatives including the possibility of using electrical and mechanical engineers from other branches within the department.